



6560-50-P

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R07-OAR-2012-0158; FRL-9689-2]**

**Approval, Disapproval and Promulgation of Implementation Plans;  
State of Nebraska; Regional Haze State Implementation Plan;  
Federal Implementation Plan for Best Available Retrofit  
Technology Determination**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** EPA is finalizing a partial approval and partial disapproval of a revision to the State Implementation Plan (SIP) for Nebraska, submitted by the State of Nebraska through the Nebraska Department of Environmental Quality (NDEQ) on July 13, 2011, that is intended to address regional haze for the first implementation period. This revision is intended to address the requirements of the Clean Air Act (CAA or Act) and EPA's rules that require states to prevent any future and remedy any existing anthropogenic impairment of visibility in mandatory Class I Areas (national parks and wilderness areas) caused by emissions of air pollutants located over a wide geographic area (also known as the "regional haze" program). States are required to assure reasonable progress toward the national goal

of achieving natural visibility conditions in Class I areas. EPA is also promulgating a Federal Implementation Plan (FIP) relying on the Transport Rule to satisfy BART for sulfur dioxide (SO<sub>2</sub>) at one source to address deficiencies in the State's plan.

**EFFECTIVE DATE:** This rule will become effective [insert 30 days from publication in **Federal Register**.]

**ADDRESSES:** EPA has established a docket for this action under Docket Identification No. EPA-R07-OAR-2012-0158. All documents in the docket are listed on the [www.regulations.gov](http://www.regulations.gov) web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Air Planning and Development Branch, Air and Waste Management Division, U.S. Environmental Protection Agency, Region 7, 901 North 5<sup>th</sup> Street, Kansas City, Kansas, 66101. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section for further information. The regional office's official hours of business

are Monday through Friday, 8:30 to 4:30, excluding Federal holidays.

**FOR FUTHER INFORMATION CONTACT:** Mike Jay, Section Chief, Atmospheric Programs Section, Air Planning and Development Branch, U.S. Environmental Protection Agency, Region 7, 901 North 5<sup>th</sup> Street, Kansas City, Kansas 66101; by telephone at (913) 551-7460; or by email at [jay.michael@epa.gov](mailto:jay.michael@epa.gov).

**SUPPLEMENTARY INFORMATION:** For purposes of this document, we are giving meaning to certain words or initials as follows:

- a. The word Act or initials CAA mean or refer to the Clean Air Act.
- b. The initials BART mean or refer to Best Available Retrofit Technology.
- c. The initials CAIR mean or refer to the Clean Air Interstate Rule.
- d. The initials CENRAP mean or refer to the Central Regional Air Planning Association.
- e. The initials CSAPR mean or refer to Cross-State Air Pollution Rule. The name "Cross-State Air Pollution Rule" and the name "Transport Rule" are used interchangeably and refer to the same program.<sup>1</sup>

---

<sup>1</sup> Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 76 FR 48208 (August 8, 2011).

- f. The initials EGUs mean or refer to Electric Generating Units.
- g. The words we, us or our or the initials EPA mean or refer to the United States Environmental Protection Agency.
- h. The initials DSI mean or refer to Dry Sorbent Injection.
- i. The initials FGD mean or refer to Flue Gas Desulfurization. This technology may also be referred to as a "scrubber".
- j. The initials FIP mean or refer to Federal Implementation Plan.
- k. The initials FLMs mean or refer to Federal Land Managers.
- l. The initials GGS mean or refer to Gerald Gentleman Station, operated by Nebraska Public Power District.
- m. The initials IMPROVE mean or refer to Interagency Monitoring of Protected Visual Environments monitoring network.
- n. The initials LNB mean or refer to low NO<sub>x</sub> burners.
- o. The initials LTS mean or refer to Long-Term Strategy.
- p. The initials NAAQS mean or refer to National Ambient Air Quality Standards.
- q. The initials NCS mean or refer to Nebraska City Station, operated by Omaha Public Power District.
- r. The words Nebraska and State mean the State of Nebraska unless the context indicates otherwise.

- s. The initials NDEQ mean or refer to the Nebraska Department of Environmental Quality.
- t. The initials NO<sub>x</sub> mean or refer to nitrogen oxides.
- u. The initials NPCA mean or refer to National Parks Conservation Association.
- v. The initials NPPD mean or refer to Nebraska Public Power District.
- w. The initials NPS mean or refer to National Park Service.
- x. The initials OFA mean or refer to overfire air.
- y. The initials OPPD mean or refer to Omaha Public Power District.
- z. The initials PM mean or refer to particulate matter.
- aa. The initials PSAT mean or refer to Particulate Source Apportionment Technology
- bb. The initials RAVI mean or refer to Reasonably Attributable Visibility Impairment.
- cc. The initials RHR mean or refer to the Regional Haze Rule.
- dd. The initials RPG mean or refer to Reasonable Progress Goal.
- ee. The initials RPO mean or refer to Regional Planning Organizations, such as CENRAP or WRAP.
- ff. The initials SCR mean or refer to selective catalytic reduction.

- gg. The initials SIP mean or refer to State Implementation Plan.
- hh. The initials SNCR mean or refer to selective non-catalytic reduction.
- ii. The initials SO<sub>2</sub> mean or refer to sulfur dioxide.
- jj. The initials TSD mean or refer to Technical Support Document.
- kk. The initials URP mean or refer to Uniform Rate of Progress.
- ll. The initials WRAP mean or refer to Western Regional Air Partnership.

## **Table of Contents**

- I. Background
- II. Final Action
- III. Public Comments and EPA Responses
- IV. Regulatory Text
- V. Statutory and Executive Order Reviews

### **I. Background**

On March 2, 2012 (77 FR 12770), EPA published a notice of proposed rulemaking for the State of Nebraska, proposing to approve a portion of Nebraska's regional haze plan for the first implementation period (through 2018), and proposing to partially approve and partially disapprove those portions addressing the requirements for BART and the long-term strategy. EPA's

proposed rulemaking also proposed a FIP relying on the Transport Rule to satisfy BART for SO<sub>2</sub> at Nebraska Public Power District, Gerald Gentleman Station, Units 1 and 2, to address the disapproval. A detailed explanation of the CAA's visibility requirements and the Regional Haze Rule<sup>2</sup> as it applies to Nebraska was provided in the proposed rulemaking and will not be restated here. EPA's rationale for proposing partial approval and partial disapproval of the Nebraska regional haze plan and for proposing the FIP was also described in detail in the proposal, and is further described in this final rulemaking.

We requested comments on all aspects of our proposed action and initially provided a 30-day public comment period, with the public comment period closing on April 2, 2012. On April 4, 2012, a notice was published extending the public comment period to May 2, 2012, and providing notice of a public hearing to be held on April 18, 2012, if requested by April 9, 2012.<sup>3</sup> EPA received two requests for the public hearing, from NDEQ by letter dated March 16, 2012, and from NPCA by letter dated April 9, 2012, however, both requests were later withdrawn by letters dated March 29, 2012, and April 11, 2012, respectively.

---

<sup>2</sup> 40 CFR 51.300-308.

<sup>3</sup> 77 FR 20333 (April 4, 2012). EPA also provided information about the public comment period extension and notice of public hearing on its website on March 30, 2012, in advance of the Federal Register publication. EPA previously noted in the docket that the website notice was posted on April 6, 2012, which was incorrect.

## II. Final Action

In today's action, EPA is finalizing a partial approval and partial disapproval of Nebraska's regional haze SIP, submitted on July 13, 2011. EPA is partially approving the majority of the provisions in the SIP revision as meeting some of the applicable regional haze requirements set forth in section 169A and 169B of the Act and in the Federal regulations codified at 40 CFR 51.300-308, and the requirements of 40 CFR Part 51, Subpart F and Appendix V. EPA is disapproving the SO<sub>2</sub> BART determinations for Units 1 and 2 of GGS because they do not comply with EPA's regulations. EPA is also disapproving Nebraska's long-term strategy insofar as it relied on the deficient SO<sub>2</sub> BART determination at GGS. EPA is finalizing a FIP relying on the Transport Rule as an alternative to BART for SO<sub>2</sub> emissions from GGS to address these deficiencies.<sup>4</sup> Today's action finalizes our approval of the other portions of the SIP, as described in the proposal. However, because EPA's basis for approval of Nebraska's SIP as satisfying the requirements of the Regional Haze Rule with respect to BART for NO<sub>x</sub> for GGS Units 1

---

<sup>4</sup> EPA notes that Nebraska may, at any time: (1) submit a revision to their regional haze SIP incorporating the requirements of the Transport Rule at which time EPA will propose to approve the SIP and withdraw the FIP we are finalizing in today's action; (2) submit a complete SIP revision substantively identical to the provisions of the EPA trading program that is approved as meeting the requirements of 40 CFR 52.39, along with a revision to their regional haze SIP incorporating those requirements, at which time EPA will withdraw the FIP we are finalizing in today's action; or (3) Nebraska may submit a new SIP revision addressing specific BART SO<sub>2</sub> controls for GGS, in which case EPA will assess it against the CAA and regional haze rule requirements as a possible replacement for the FIP.



and 2 has been modified in light of comments received on the State's determination, EPA provides additional explanation below and in the response to comments in section III of this notice.

EPA received a number of comments on the proposed rulemaking regarding Nebraska's NO<sub>x</sub> BART determination for GGS Units 1 and 2. In its SIP submission, Nebraska determined that NO<sub>x</sub> BART for GGS Units 1 and 2 was LNB and OFA at the presumptive BART NO<sub>x</sub> emission rate of 0.23 lbs/MMBtu. The commenters contended that the State's estimated costs of SCR were inflated, resulting in artificially high cost effectiveness numbers, and that the deciview improvement from the use of SCR would be significant, particularly when a higher control efficiency (and lower emission limit) is considered. The commenters added that when the cost effectiveness and deciview numbers are adjusted, the resultant incremental cost effectiveness of SCR over LNB and OFA and the cost per deciview (\$/dv) are below Nebraska's own thresholds, and it is therefore reasonable to determine that SCR is BART for GGS Units 1 and 2.

In response to these comments, EPA conducted further analysis of the costs of SCR at GGS. EPA found that Nebraska made some cost assumptions which were not in accordance with EPA's Cost Control Manual<sup>5</sup> which resulted in inflated cost

---

<sup>5</sup> EPA Air Pollution Control Cost Manual, Sixth Edition, EPA/452/B-02-001, January 2002

estimates. When EPA's adjusted cost estimates based on the manual are used, the resultant incremental cost effectiveness and \$/dv are indeed below Nebraska's own thresholds for what it considered reasonable for BART controls. In addition, the cost effectiveness and deciview improvement are within a range that many states and EPA have found to be reasonable for NO<sub>x</sub> BART controls. Therefore, as a result of the comments received and additional analysis performed, it appears that Nebraska's NO<sub>x</sub> BART determination of LNB and OFA at a rate of 0.23 lbs/MMBtu for GGS Units 1 and 2, by itself, is not supported by the record. However, on August 8, 2011, EPA finalized the Transport Rule and FIP.<sup>6</sup> The Transport Rule, as promulgated, requires 28 states in the eastern portion of the United States, including Nebraska, to significantly improve air quality by controlling EGU SO<sub>2</sub> and NO<sub>x</sub> emissions that cross state lines and significantly contribute to ground-level ozone and/or fine particle pollution in other states. Nebraska is subject to the Transport Rule and FIP for NO<sub>x</sub> at 40 CFR 52.1428. On June 7, 2012, EPA finalized its finding that the trading programs in the Transport Rule achieve greater reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas than source-specific EGU BART in those states

---

<sup>6</sup> See Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 76 FR 48208 (August 8, 2011)

covered by the Transport Rule.<sup>7</sup> Given the emission reductions provided by the NO<sub>x</sub> limits associated with Nebraska's NO<sub>x</sub> BART determination of LNB and OFA for GGS Units 1 and 2, which strengthen the Nebraska SIP, in conjunction with the existing Transport Rule FIP which already applies to Nebraska and has been determined to provide greater reasonable progress than BART, in today's action, EPA is finalizing its proposed approval of Nebraska's SIP as satisfying the requirements of the Regional Haze Rule with respect to BART for NO<sub>x</sub>.

### **III. Public Comments and EPA Responses**

During the public comment period we received written comments from the National Park Service; Omaha Public Power District; Nebraska Association of Resources Districts, on behalf of several Natural Resources Districts; Nebraska Department of Environmental Quality; the Nebraska Attorney General; Nebraska Public Power District; National Parks Conservation Association on behalf of themselves, Nebraska Environmental Action Coalition, Plains Justice, and Sierra Club; and 35 similar letters from individuals. We have summarized the comments and provided our responses below. Full copies of the comment letters are available in the docket for this rulemaking.

---

<sup>7</sup> See Regional Haze: Revisions to Provisions Governing Alternatives to Source-Specific BART Determinations, Limited SIP Disapprovals, and Federal Implementation Plans, 77 FR 33642 (June 7, 2012)

Comments and responses below are grouped by subject rather than by commenter.

A. *Comments Regarding EPA's Action*

**Comment 1:** We received identical comment letters from thirty-five individuals encouraging more emission controls on Nebraska sources in order to address haze in the South Dakota National Parks. The letters point out that at the current rate, the South Dakota Class I areas will not meet the goal of natural visibility conditions for more than two hundred years. The commenters encourage EPA to require controls at Gerald Gentleman Station and Nebraska City Station specifically.

**Response 1:** EPA appreciates the comments, but is partially approving Nebraska's regional haze SIP and using the trading programs of the Transport Rule as a BART alternative for the reasons stated in the proposal and in other responses to comments in this action.

**Comment 2:** One commenter referenced and incorporated its January 21, 2011, comments to Nebraska on its draft regional haze plan. The commenter stated that it is incorporating these comments by reference because these comments are "inherently related" to this action.

**Response 2:** In today's rule, EPA is taking final action on the partial approval and partial disapproval of Nebraska's regional haze SIP. EPA is also taking final action on a FIP relying on the Transport Rule to satisfy BART for SO<sub>2</sub> at one source to address the disapproval. The comments referenced by the commenter were made to the State of Nebraska in a separate action. Nebraska timely responded to these comments. All of the comments that were incorporated by reference are addressed in today's action in EPA's response to comments. A copy of Nebraska's response can be found in the docket to this action as Appendix 3.1 to Nebraska's SIP submission.

*B. Comments Regarding EPA and State Roles*

**Comment 3:** We received several comments questioning whether we have CAA authority to disapprove Nebraska's BART determinations and LTS and determine BART through a FIP. The commenters generally contended that Nebraska followed the CAA and EPA's rules in making the BART and LTS determinations for the regional haze SIP. The commenters stated that Nebraska followed the statutory and regulatory process, and that EPA is exceeding its authority in substituting its judgment regarding appropriate BART for GGS. One commenter stated that EPA has no record upon

which to support its proposed action to substitute its judgment for NDEQ. The commenters also stated that EPA cannot "arbitrarily and capriciously" substitute its own determination without a showing that Nebraska's regional haze SIP failed to comply with the requirements of the CAA.

**Response 3:** Congress directed in section 110 of the CAA that states would take the lead in developing implementation plans, but balanced that decision by requiring EPA to review the plans to determine whether a SIP meets the requirements of the CAA. EPA's review of SIPs is not limited to a ministerial type of "rubber-stamping" of a state's decisions. EPA must consider not only whether the state considered the appropriate factors, but also whether the state acted reasonably in doing so. EPA ensures that such authority is reasonably exercised. EPA has the authority to issue a FIP either when EPA has made a finding that the state has timely failed to submit a SIP or where EPA has found a SIP deficient. Here, EPA is approving as much of the Nebraska SIP as possible and adopting a FIP only to fill the remaining gap. Our action today is consistent with the statute.

As explained in the proposal, the State's SO<sub>2</sub> BART determination for GGS is not approvable for a number of

reasons, including errors in Nebraska's cost analysis for FGD controls, the reasonableness of the costs of controls, the significant visibility improvement achieved as a result of installing FGD or DSI, and improper rejection of DSI. See 77 FR 12770, 12780. We have determined that the faults in Nebraska's analysis were significant enough that they resulted in BART determinations for SO<sub>2</sub> that were both unreasoned and unjustified, and therefore are not approvable.

In the absence of an approvable BART determination in the SIP for SO<sub>2</sub> for GGS, we are obliged to promulgate a FIP to satisfy the CAA requirements. We are also required by the terms of a consent decree with NPCA, entered with the U.S. District Court for the District of Columbia to ensure that Nebraska's CAA requirements for regional haze are finalized by June 15, 2012. Because we have found the State's SIP submission does not adequately satisfy the BART requirements in full and because we have previously found that Nebraska failed to timely submit this SIP submission, we have not only the authority, but a duty to promulgate a FIP that meets these requirements. Our action in large part approves the regional haze SIP submitted by Nebraska; the disapproval of the SO<sub>2</sub> BART determination for GGS and

the imposition of a FIP does not encroach on State authority. This action only ensures that CAA requirements are satisfied using our authority under the CAA. We note that Nebraska may submit a new SIP revision addressing the issue of SO<sub>2</sub> controls for GGS, in which case we will assess it against CAA and RHR requirements as a possible replacement for the FIP. See also EPA's response to comments 32, 33, and 34, which are incorporated by reference.

**Comment 4:** Two commenters argued that our proposal is inconsistent with the decision of the D.C. Circuit in *Am. Corn Grower's Ass'n v. EPA*, 291 F.3d 1 (D.C. Cir. 2002). The commenters contended that language in the decision affirms its views regarding state authority and EPA's lack of authority in regulating the problem of regional haze. In particular, the *American Corn Growers* decision had described the CAA as "giving the states broad authority over BART determinations." *Id.* at 8.

**Response 4:** We disagree that our action is inconsistent with the *American Corn Growers* decision. The State's analysis of BART for SO<sub>2</sub> at GGS was flawed due to reasons discussed in the proposal and elsewhere in this notice. We have determined these issues resulted in non-approvable SO<sub>2</sub>



BART determinations for GGS Units 1 and 2. We recognize the State's broad authority over BART determinations, and recognize the State's authority to attribute weight and significance to the statutory factors in making BART determinations. As a separate matter, however, a state's BART determination must be reasoned and based on an adequate record. Although we have largely approved the State's regional haze SIP, we cannot agree that CAA requirements are satisfied with respect to the SO<sub>2</sub> BART determination at GGS.

**Comment 5:** One commenter generally asserted that we lack authority to disapprove Nebraska's regional haze SIP because of past cases. The commenter cites *Train v. NRDC*, 421 U.S. 60, 79 (1975), *Commonwealth of Vir. v. EPA*, 108 F.3d 1397 (D.C. Cir. 1997), and *Bethlehem Steel Corp. v. Gorusch*, 742 F.2d 1028 (7<sup>th</sup> Cir. 1984). Pursuant to these cases, the commenter argued that we cannot question the wisdom of a state's choices or require particular control measures if plan provisions satisfy CAA standards.

**Response 5:** States are required by the CAA to address the BART requirements in their SIP. Our disapproval of the SO<sub>2</sub> BART determination in Nebraska's RH SIP is authorized under the CAA because the State's SO<sub>2</sub> BART determination for GGS

does not satisfy the statutory criteria. The State's analysis of BART for SO<sub>2</sub> at GGS was flawed due to reasons discussed in the proposal and elsewhere in this notice. While states have authority to exercise different choices in determining BART, the determinations must be reasonably supported. Nebraska's errors were significant enough that we cannot conclude the State determined BART for SO<sub>2</sub> at GGS according to CAA standards. The cases cited by the commenter stress important limits on EPA authority in reviewing SIP submissions, but our disapproval of this SO<sub>2</sub> BART determination for GGS has an appropriate basis in our CAA authority, and does not conflict with these limitations.

**Comment 6:** One commenter cited to section 169A(g)(2) to support its contention that the State of Nebraska has "primary authority," where EPA has no authority or lesser authority. Section 169A(g)(2) begins, "in determining [BART] the State (or the Administrator in determining emissions limitations which reflect such technology) shall take into consideration" several requisite statutory factors. The commenter placed special emphasis on the references to the "state" in these provisions and contends

that the plain language of the statute provides that states, and not EPA, have the authority to determine BART.

**Response 6:** We agree that states have authority to determine BART, but we disagree with commenter's assertions that EPA has no authority or lesser authority to determine BART when promulgating a FIP. As the parenthetical in section 169A(b)(2)(A) indicates, the Administrator has the authority to determine BART "in the case of a plan promulgated under section 7510(c)." In other words, the Administrator has explicit authority to determine BART when promulgating a FIP. Our BART determination utilizes our authority under 40 CFR 51.308(e)(3) to rely on an emissions trading program, here, the Transport Rule, which provides greater reasonable progress towards improving visibility than source-specific BART. We disagree that the language of the CAA limits our authority to determine BART in the case of a FIP. See also EPA's responses to comments 3, 5, and 7, which are incorporated by reference.

**Comment 7:** One commenter expressed its view that its arguments were reinforced by legislative history of the 1977 CAA amendments. The commenter referred to statements of Senator Edmund Muskie regarding the conference agreement on the provisions for visibility protection in those

amendments. Senator Muskie stated that under the conference agreement the state, "not the Administrator," identifies BART-eligible sources and determines BART. 123 Cong. Rec. 26854 (August 4, 1977). The commenter also noted that *Am. Corn Growers Ass'n v. EPA* 291 F.3d 1 (D.C. Cir. 2002) used legislative history, including the Conference Report on the 1977 amendments, when the Court had invalidated past regulatory provisions regarding BART for constraining state authority. The Court stated that the Conference report confirmed that Congress "intended the states to decide which sources impair visibility and what BART controls must apply to those sources."

**Response 7:** We agree that the CAA places the requirements for determining BART for BART-eligible sources on states. As discussed previously, the CAA also requires the Administrator to determine BART in the absence of an approvable determination from the state. Because Nebraska's BART determination for SO<sub>2</sub> for GGS does not conform to the RHR and the BART Guidelines<sup>8</sup> and is not approvable, we are authorized and at this time required to promulgate a FIP.

---

<sup>8</sup> The BART Guidelines: 40 CFR Part 51, Appendix Y.

**Comment 8:** One commenter cited to 169A(b) stating that this provision only allows for EPA to issue guidelines with technical and procedural guidance for determining BART but for the actual implementation plan to be developed by each state (except for fossil-fueled power plants with capacity that exceeds 750 megawatts (MW)). The commenter stated that the CAA does not provide EPA the authority to disapprove a BART decision or require specific controls for BART.

**Response 8:** States shoulder significant responsibilities in CAA implementation and effectuating the requirements of the RHR. EPA has the responsibility of ensuring that state plans, including regional haze SIPs, conform to CAA requirements. None of the CAA provisions cited by commenters change our conclusion that we have authority and duty to issue a FIP to satisfy BART requirements given that Nebraska's regional haze SIP is not fully approvable. Our inability to approve the State's BART determination for SO<sub>2</sub> for GGS means we must follow through on our non-discretionary duty to promulgate a FIP.

**Comment 9:** Several commenters who argued that the plain language of the CAA requires that states are the primary or only BART determining authorities have also cited our

preamble language from past Federal Register publications that they believe reinforces their contention. For example, several commenters cited 70 FR 39104 at 39107, which reads in part, "the State must determine the appropriate level of BART control for each source of BART." One commenter also cited 70 FR 39104 at 31958 which provides that the "State will determine a 'best system of continuous emission reduction' based upon its evaluation of these factors." One commenter cited to 70 FR 39104 at 39170-39171 stating the State has discretion to determine the order in which it should evaluate control options for BART. One commenter also commented that the CAA provides Nebraska with great discretion to balance the five statutory factors and that states are free to determine the weight and significance assigned to each factor.

**Response 9:** We agree that states are assigned statutory and regulatory authority to determine BART and that many past EPA statements have confirmed state authority in this regard. Although the states have the freedom to determine the weight and significance of the statutory factors, they have an overriding obligation to come to a reasoned determination. As detailed in our proposal and the supporting TSD, Nebraska's SO<sub>2</sub> BART determination for GGS

was based on flawed analysis and an unreasonable conclusion. Because the State's SO<sub>2</sub> BART determination for GGS is not approvable, we are obligated to step into the shoes of the State and arrive at our own BART determinations.

*C. Comments Regarding Public Notice*

**Comment 10:** One commenter insinuated that EPA held a meeting with NDEQ and local stakeholders in North Platte, Nebraska on April 12, 2012, "in lieu" of a public hearing.

**Response 10:** The April 12, 2012, meeting was not held "in lieu" of a public hearing. As the commenter notes, NDEQ requested a public hearing on March 16, 2012, and then on April 2, 2012, withdrew the request for public hearing. As required by section 307(d) of the CAA, EPA provided the opportunity for public hearing on its proposed FIP; although two parties initially requested a public hearing, both requests were withdrawn. Because the requests were withdrawn and no other timely requests for public hearing were received, EPA canceled the public hearing that had been scheduled to take place. EPA's notes from the April 12, 2012, meeting are available in the docket for this action.

**Comment 11:** NPPD submitted comments expressing concerns about EPA's cancellation of the public hearing and decision to have a "private" meeting with NPCA as a substitute for the public hearing. NPPD requested to attend the meeting between EPA and NPCA, and stated that not allowing NPPD and other interested parties to attend the meeting deprived them of their due process rights in this matter.

**Response 11:** Due to the time sensitive nature of this comment and request, EPA responded to NPPD by letter on April 17, 2012. For completeness of our response to comments in today's action, EPA summarizes its response here. Copies of NPPD's April 13, 2012, letter and EPA's April 17, 2012, letter are included in the docket for this rulemaking. EPA disagrees with the suggestion that all necessary public notice procedures were not followed by EPA, or that any parties were deprived of their due process rights. During the public comment period, EPA received two requests for a public hearing, one from NDEQ and one from NPCA, both of which were subsequently withdrawn by the requestors.<sup>9</sup> No other requests for the public hearing were received during the prescribed time frame, including from NPPD, and therefore, EPA cancelled the public hearing.

---

<sup>9</sup> Copies of all letters requesting a public hearing, and later withdrawing those requests, as well as summaries of all meetings, are provided in the docket for EPA's rulemaking, Docket No. EPA-R07-OAR-2012-0158.



NDEQ and NPCA both requested to meet with EPA regarding our proposed rule. The meetings with NDEQ and NPCA were not "public meetings" and no public notice of these meetings was provided. EPA did, however, provide a summary of the meetings for the docket.<sup>10</sup> EPA meets with various stakeholders regarding proposed actions on a routine basis. EPA met with NPCA representatives to listen to their interests just as EPA met with NPPD at the meeting hosted by NDEQ. NPPD provided no specific basis for its contention that it was denied "due process", and it submitted extensive comments (46 pages) on the proposed rule.

*D. Comments About the Benefits of Regional Haze Pollution Controls*

**Comment 12:** One commenter noted that pollutants that cause visibility impairment also harm public health. Specifically, the commenter asserted the following: "Regional haze pollutants include NO<sub>x</sub>, SO<sub>2</sub>, PM, ammonia, and sulfuric acid. NO<sub>x</sub> is a precursor to ground level ozone, which is associated with respiratory diseases, asthma attacks, and decreased lung function. In addition, NO<sub>x</sub> reacts with ammonia, moisture, and other compounds to form

---

<sup>10</sup> A summary of the meeting with NPCA was provided for the docket prior to the time that NPPD submitted its comments on the proposed rule.

particulates that can cause and worsen respiratory diseases, aggravate heart disease, and lead to premature death. Similarly, SO<sub>2</sub> increases asthma symptoms, leads to increased hospital visits, and can form particulates that aggravate respiratory and heart diseases that cause premature death. PM can penetrate deep into the lungs and cause a host of health problems, such as aggravated asthma, chronic bronchitis, and heart attacks."

The commenter cited to EPA's estimates that in 2015, full implementation of the RHR nationally will prevent 1,600 premature deaths, 2,200 non-fatal heart attacks, 960 hospital emissions, and over one million lost school and work days. The RHR will result in health benefits valued at \$8.4 to \$9.8 billion annually.

The commenter also stated that haze-causing emissions harm terrestrial and aquatic plants and animals, soil health and moving and stationary water bodies by contributing to acid rain, ozone formation, and nitrogen deposition. The commenter also stated that haze-causing pollutants are precursors to ozone. The commenter stated that ground-level ozone formation impacts plants and ecosystems in a variety of ways.

**Response 12:** We appreciate the commenter's concerns regarding the negative human health and ecosystem impacts of emissions from the units at issue. We agree that the same NO<sub>x</sub> emissions that cause visibility impairment also contribute to the formation of ground-level ozone, which has been linked with respiratory problems, aggravated asthma, and even permanent lung damage. We also agree that SO<sub>2</sub> emissions that cause visibility impairment also contribute to increased hospital visits and can form particulates that aggravate respiratory and heart diseases, and that both NO<sub>x</sub> and SO<sub>2</sub> cause acid rain. We agree that the same emissions that cause visibility impairment can form fine PM and be inhaled deep into lungs, which can cause respiratory problems, decreased lung function, aggravated asthma, bronchitis, and premature death. We agree that these pollutants can have negative impacts on ecosystems, damaging plants, trees, and other vegetation (including crop yields), which could have a negative effect on species diversity in our ecosystems. Therefore, although our action concerns visibility impairment, we note the potential for significant improvements in human and ecosystem health.

**Comment 13:** We received one comment that the proposed action would help the economy in a variety of ways. The commenter stated that tourism in national parks provides Federal and local private sector revenue and provides hundreds of thousands of jobs. The commenter stated that national park tourism is a critical component to the economy of the Midwest and deterioration in improvement to visibility at a national park can reduce tourism to those parks. The commenter also stated that requiring facilities to install controls also creates jobs.

**Response 13:** Although we did not consider the potential positive benefits to local economics in making our decision today, we do acknowledge that improved visibility may have a positive effect on tourism and local jobs.<sup>11</sup> This action may also result in significant improvements in human health. Improved human health can reduce healthcare costs and reduce the number of missed school and work days in the community.

*E. Comments Regarding Reasonable Progress Goals and Long-term Strategy*

**Comment 14:** One commenter states that the development of the LTS is the responsibility of each affected state, not

---

<sup>11</sup> EPA has addressed employment impacts of the Transport Rule. 76 FR 28208, 48317-48319.

the EPA, and the state is only required to ensure that the RPG of the state containing the Class I area is met. EPA proposed disapproval of Nebraska's LTS on the basis that it relied on the deficient BART determination for SO<sub>2</sub> at GGS. The commenter contends that this rationale is not consistent with the Federal requirements, and that Nebraska adequately addressed all requirements for the LTS set forth at 40 CFR 51.308(d)(3) in its regional haze SIP submission, including consultation with South Dakota and other affected states, tribes, and FLMs on coordinated emission management strategies; provision of all applicable technical information pertaining to the apportionment of emission reduction obligations, including the baseline emissions inventory; identification of all anthropogenic sources of visibility impairment considered by the State; and consideration of the factors at 40 CFR Part 51.308(d)(3)(v). Another commenter maintains that because Nebraska's SO<sub>2</sub> BART determination was not defective, Nebraska's LTS should be approved.

**Response 14:** As further explained elsewhere in today's action, Congress directed in section 110 of the CAA that states would take the lead in developing implementation plans, but balanced that decision by requiring EPA to

review the plans to determine whether a SIP meets the requirements of the CAA. EPA must consider not only whether the State considered the appropriate factors in development of its LTS, but also whether the State acted reasonably in doing so. The commenter correctly cites the factors that must be considered in development of the LTS, and notes that EPA largely approved the LTS, except for that portion that relies on what the EPA proposed was the State's flawed SO<sub>2</sub> BART determination for GGS. EPA disagrees with the commenter's statements that this does not provide a basis for disapproval of a portion of the Nebraska's LTS. Section 169A of the CAA and the EPA's implementing regulations require states to establish LTS for making reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas. Implementation plans must also give specific attention to certain stationary sources. Specifically, section 169A(b)(2)(A) of the CAA requires states to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the natural visibility goal, including a requirement that certain categories of existing major stationary sources built between 1962 and 1977 procure, install, and operate BART. Because EPA cannot

fully approve SO<sub>2</sub> BART for GGS, we cannot fully approve a LTS that relies on it.

For the reasons cited elsewhere in today's action, EPA disagrees that Nebraska's SO<sub>2</sub> BART determination for GGS was reasonable and in accordance with 40 CFR 51.308(e) and the BART Guidelines. Therefore, in this action, EPA appropriately disapproves Nebraska's LTS only insofar as it relied upon the improper SO<sub>2</sub> BART determination for GGS. See also EPA's response to comment 3, which is incorporated by reference.

**Comment 15:** Several commenters point out what they contend are inconsistencies between EPA's approval of the South Dakota RPGs for Badlands and Wind Cave Class I areas<sup>12</sup>, and today's action. The commenters state that Nebraska's work through CENRAP and direct consultation with South Dakota as well as other states, tribes and FLMs ensured that all entities were fully informed of the proposed decisions in the Nebraska regional haze SIP. If additional measures were necessary to ensure that South Dakota met their RPGs, it would have been appropriate for either (1) South Dakota to request the additional measures from Nebraska, or (2) EPA to disapprove the LTS of South Dakota and for South

---

<sup>12</sup> 77 FR 24845 (April 26, 2012).

Dakota to notify Nebraska that additional measures were needed. However, EPA approved the South Dakota regional haze SIP in its entirety. The commenter asserts that the EPA region with oversight over a Class I area is tasked with ensuring that the applicable state's RPGs are sufficient and practical. If that state's RPGs are not sufficient or practical, each state participating in the regional planning process for the applicable Class I area would be required to re-evaluate their LTS and make appropriate revisions to ensure they met their apportionment of emission reduction obligations necessary for achieving reasonable progress. The commenters contend that through its approval of the South Dakota regional haze plan, EPA verified that each state involved in the regional planning process, including Nebraska, met their apportionment of emission reductions, without requiring any implementation of FGD at GGS. Another commenter asserts that the emission projections used in the WRAP regional modeling clearly assumed scrubbers operated at 0.15 lbs/MMBtu would be installed to meet SO<sub>2</sub> BART at GGS, and because our proposal relied on the Transport Rule in lieu of source-specific BART for SO<sub>2</sub> at GGS, South Dakota will not likely meet its reasonable progress goals at Badlands



and Wind Cave National Parks, which already fall short of the uniform rate of progress towards natural background visibility conditions. Commenters also contend that these same issues apply to Colorado, Oklahoma, Missouri, and Arkansas, which also relied on RPO modeling and assumed presumptive SO<sub>2</sub> BART emission reductions at GGS, and at a minimum, GGS should meet presumptive BART emission levels.

**Response 15:** EPA disagrees that inconsistencies exist between today's action and EPA's approval of South Dakota's RPGs, and disagrees that inclusion of presumptive BART for purposes of air quality modeling necessitates a source-specific SO<sub>2</sub> BART FIP for GGS.

South Dakota, as a state hosting Class I areas, established goals for Badlands and Wind Cave National Parks that provide for reasonable progress towards achieving natural visibility conditions, in accordance with 40 CFR 51.308(d)(1). As set forth in EPA's proposed and final approval of South Dakota's regional haze SIP<sup>13</sup>, South Dakota constructed its uniform rate of progress and set the RPGs consistent with the requirements of the RHR.

---

<sup>13</sup> EPA's proposed approval of South Dakota's regional haze SIP is found at 76 FR 76646 (Dec. 8, 2011) and EPA's final approval is found at 77 FR 24845 (April 26, 2012).

To set RPGs, states looked to the air quality modeling performed by the RPOs. The modeling assumed emission reductions from each state based on extensive consultation among the states as to appropriate strategies for addressing haze. The air quality models used to support the regional haze SIPs are extremely complex, and due to the time consuming nature of performing the modeling, this work was performed early in the process. The emissions projections by the RPOs, relied upon in the air quality modeling, incorporated the best available information at the time from the states, and utilized the appropriate methods and models to provide a prediction of emissions from all source categories into the future. There was an inherent amount of uncertainty in the assumed emissions from all sources, including emissions from BART-eligible sources, as the final control decisions by all of the states were not yet complete. Nebraska provided the RPOs with their best estimates of what their regional haze SIP would achieve as inputs for the modeling, before they had made final BART determinations. The regional modeling incorporated BART presumptive emission reductions, and other states relied on these reductions in setting their RPGs.

Nebraska's BART determination ultimately did not require presumptive SO<sub>2</sub> BART for GGS, and Nebraska did not provide any information demonstrating those emission reductions would be otherwise achieved. The relevant requirement at 40 CFR 51.308(d)(3)(ii) is that Nebraska must demonstrate that it has included all measures necessary to obtain its share of the emission reductions needed to meet the RPGs for Class I areas where it causes or contributes to impairment. Class I states like South Dakota originally set the reasonable progress goals in their SIP based on emission reductions expected to be achieved through application of presumptive BART, CAIR, and other emission reductions qualified for that purpose. South Dakota had the opportunity to comment on Nebraska's draft BART permits as well as the overall regional haze SIP, and did not ask for additional emission reductions from Nebraska. As Nebraska did establish a BART limit for GGS and informed South Dakota that its BART determination deviated from what was included in the modeling, the fact that the final BART determination varied from the predictions is not grounds for disapproving either SIP. The RPGs are not enforceable goals. South Dakota will have the responsibility to consider whether other reasonable

control measures are appropriate to ensure reasonable progress during subsequent periodic progress reports and regional haze SIP revisions as required by 40 CFR 51.308(f)-(h), and may at that time consider asking Nebraska for additional emission reductions.

**Comment 16:** One commenter stated that the source retirement discussion in the Nebraska SIP submission was inadequate, as it did not contain a discussion of changes in energy and other markets and their likely effect on future emissions.

**Response 16:** The requirement in 40 CFR 51.308(d)(3)(v) is for a state to consider source retirement and replacement schedules as a factor in developing its long-term strategy. Nebraska considered source retirements and replacements as a part of estimating the change in emissions from the baseline year of 2002 through the first implementation period for regional haze SIPs (2018). As stated in the SIP, 2002 emissions were grown to year 2018 utilizing EPA approved methods including the use of MOBILE 6.2 vehicle emission modeling software, and the Integrated Planning Model (IPM) version 2.93 for EGUs. These tools include estimations of source retirement and replacements when accounting for the effects of Federal and state rules.

Thus, we believe that Nebraska adequately considered source retirements and replacements when developing its long-term strategy.

**Comment 17:** One commenter criticized Nebraska's lack of analysis of potential emission reductions from stationary sources that are not BART-eligible or that are BART-eligible but not subject-to-BART.

**Response 17:** The long-term strategy requirements of the rule do not specifically require an analysis of the potential emission reductions from stationary sources that are not BART-eligible or that are BART-eligible but not subject-to-BART. The requirement is for the State to identify all anthropogenic sources of visibility impairment considered by the State in developing its long-term strategy. The CENRAP modeling demonstration provided by the State considered emissions of all anthropogenic source categories including major and minor stationary sources, mobile sources, and area sources in developing its strategy. With the exception of the SO<sub>2</sub> component of the BART requirements as described elsewhere in our proposal and in this notice, the State has successfully demonstrated compliance with all other remaining elements of the long-term strategy requirements.

**Comment 18:** One commenter questioned why EPA would point out in its proposed action that, "...although Nebraska participated as a member state in CENRAP, the greatest impacts from Nebraska sources occur in a WRAP state - South Dakota."

**Response 18:** This statement is merely reiterating the fact that the Class I areas most impacted by emissions from Nebraska are in South Dakota which is a participant in a different RPO, as noted elsewhere in the proposal.

*F. Comments Regarding Visibility Improvement Metrics*

**Comment 19:** One commenter stated that if EPA is relying on a particular threshold for determining the significance of a visibility benefit, this threshold should be explained and identified.

**Response 19:** There is no particular threshold for determining significance of visibility benefit in the regional haze rule. Significance is a source- and Class I-specific evaluation, meaning that it depends on how much visibility improvement is needed at the Class I area(s), how much a specific source impacts the Class I area(s), and the cost effectiveness and potential visibility improvement of available control options. States have latitude to

determine these thresholds<sup>14</sup>, providing support and a reasonable and adequate basis for why they selected the thresholds, and to determine BART and reasonable progress controls, in consultation with other impacted states. As long as this evaluation is done adequately and the states provide a reasoned basis for their decisions, EPA will defer to the state.

**Comment 20:** One commenter remarked that they agree with use of the dollars per deciview metric to select BART controls, but encourage cumulative visibility benefits to be included, rather than just results at the nearest Class I area. They reiterate EPA's comments in the January 21, 2011, letter to NDEQ on the draft SIP, stating that "a \$/dv analysis is likely to be less meaningful if the analysis does not take into account the visibility impacts at multiple Class I areas or ignores the total improvement (i.e., the frequency, magnitude, and duration of the modeled changes in visibility)."

Another commenter discussed the importance of considering cumulative visibility benefits, both as the sum of smaller improvements at one Class I area and as the

---

<sup>14</sup> BART guidelines at 70 FR 39170: However, we believe the States have flexibility in setting absolute thresholds, target levels of improvement, or de minimis levels since the deciview improvement must be weighed among the five factors, and States are free to determine the weight and significance to be assigned to each factor. For example, a 0.3, 0.5, or even 1.0 deciview improvement may merit stronger weighting in one case versus another, so one "bright line" may not be appropriate.

benefit of an action to all impacted Class I areas, as EPA has done previously in other actions, such as Oklahoma and New York.

**Response 20:** The BART Guidelines list the dollars per deciview ratio as an additional cost effectiveness metric that can be employed along with dollars per ton in a BART evaluation. However, EPA does not have guidelines on how the dollars per deciview metric is to be used, and there is inconsistency in how states have calculated it. We believe that dollars per deciview is one of several metrics that can be used to analyze cost of visibility improvement, and reaffirm our position that the calculation is more meaningful if cumulative visibility benefits are accounted for.

**Comment 21:** One commenter called the use of a cumulative impacts analysis for GGS "unauthorized". The commenter pointed out that a BART-eligible source is "subject to BART" only if it "may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area," adding emphasis to area.

**Response 21:** We consider this to be somewhat of a moot point, as the source in question, GGS, clearly causes visibility impairment at the closest Class I area,



Badlands, even without consideration of cumulative impacts.<sup>15</sup>

However, as stated previously and consistent with other EPA actions on regional haze, we also believe that a cumulative impacts analysis is a useful tool for examining the impact of a BART-subject source and the visibility improvement to be gained by the addition of emission controls, and do not agree that use of this tool is unauthorized or unreasonable.

**Comment 22:** One commenter criticizes the lack of attention EPA gives in its proposed action to Nebraska's dollar per deciview analysis presented in its SIP. The commenter reiterates Nebraska's conclusions on cost per deciview of improvement, saying that the dollars per deciview of visibility improvement for FGD at GGS far exceeded that of any other utility Nebraska compared it to. The commenter states that EPA "does not and cannot disturb Nebraska's threshold of \$40 million per deciview per year."

**Response 22:** EPA reviewed all of Nebraska's analysis presented in the SIP, including total annualized costs, dollars per ton, dollars per deciview, incremental dollars per ton, incremental dollars per deciview, and frequency

---

<sup>15</sup> CALPUFF modeling shows that GGS impacts Badlands an average of 2.93 dv in the baseline years of 2001-2003.

(number of days) impacted. The State is free to set the thresholds it chooses, as long as it provides support and a reasonable and adequate basis for the threshold. Nebraska set a cost threshold at \$40 million/dv/year as reasonable for BART controls, however, the State did not provide justification or basis for why it chose that threshold.

For BART, the BART Guidelines require that cost effectiveness be calculated in terms of annualized dollars per ton of pollutant removed, or \$/ton<sup>16</sup>, so the language in our proposal focuses on \$/ton.

In addition, if the cost of controls are overestimated, and the true efficiency of the control technology is not modeled, as is the case with the BART analysis at GGS, the result is a metric that overestimates cost and underestimates visibility improvement.

As seen in Table 1, even with overestimated costs, if visibility improvement is considered on a cumulative basis, the cost per deciview for SO<sub>2</sub> control is under Nebraska's threshold - \$34,238,388. Without overestimated costs, even at the presumptive level of control, dollars per deciview are half of Nebraska's threshold - \$20,987,655. The cumulative visibility benefits of more stringent levels of

---

<sup>16</sup> 70 FR 39167

control, such as 0.06 lbs/MMBtu, is unknown, but would clearly be well under half of the threshold Nebraska set as being cost effective for BART controls on a dollars per deciview basis.

<b>Table 1: Range of GGS Dry Scrubber Cost Effectiveness</b>				
	<b>Dry FGD (Nebraska's original BART analysis)</b>	<b>Dry FGD EPA's estimate Revised from comments</b>		
<b>SO<sub>2</sub> Baseline</b>	49,785	49,785		
<b>Uncontrolled Emission Level (lbs/MMBtu)</b>	0.749	0.749		
<b>Controlled Emission Rate (lbs/MMBtu)</b>	0.15	0.15	0.11	0.06
<b>Percent Reduction</b>	80%	80%	85.3%	92%
<b>SO<sub>2</sub> Emission Reduction (tons)</b>	39,815	39,815	42,473	45,797
<b>Total Annualized Cost</b>	\$108,535,690	\$66,530,865	\$67,871,854	\$69,519,846
<b>Total Cost Effectiveness (\$/ton)</b>	\$2,726	\$1,671	\$1,598	\$1,518
<b>\$/dv (Badlands)</b>	\$139,148,321	\$85,295,981	unknown <sup>a</sup>	unknown
<b>\$/dv (Cumulative)<sup>b</sup></b>	\$34,238,388	\$20,987,655		

<sup>a</sup> Nebraska did not conduct visibility modeling for FGD at a rate of 0.11 or 0.06 lbs/MMBtu SO<sub>2</sub>.

<sup>b</sup> In calculating cumulative visibility improvement, NDEQ only considered the two closest Class I areas, Badlands and Wind Cave in South Dakota. As described in our TSD, we believe that it is more appropriate to calculate cumulative improvement from all six Class I areas which are impacted greater than 0.5 dv from GGS Units 1 and 2.

#### *G. Comments Regarding BART for Particulate Matter*

**Comment 23:** One commenter stated that EPA failed to propose approval or disapproval of Nebraska's PM BART determination for NCS and GGS. The commenter provides that EPA characterized Nebraska's PM BART analyses for NCS and GGS as "...direct PM emissions from [the facility] do not significantly contribute to visibility impairment, and therefore, a full five factor BART analysis for PM was not

needed.” 77 FR 12778. The commenter contends that although EPA proposed to agree with these conclusions, it did not approve or disapprove Nebraska’s further conclusion that BART for PM is existing controls and requirements, which it is required to do.<sup>17</sup>

**Response 23:** We disagree with the commenter’s assertion that EPA is required to approve or disapprove Nebraska’s conclusion that BART for PM is existing controls and requirements. The RHR and the BART Guidelines<sup>18</sup> require a determination as to whether a source is subject to BART, that is, whether the BART-eligible source emits any pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any Class I area. In performing this analysis, Nebraska appropriately utilized source-specific CALPUFF modeling to analyze whether SO<sub>2</sub>, NO<sub>x</sub>, and direct PM emissions contributed to visibility impairment at Class I areas. As a result of the modeled demonstration that impairment due to direct PM emissions is minimal, Nebraska appropriately concluded that direct PM emissions from GGS and NCS do not significantly contribute to visibility impairment. Under the RHR and

---

<sup>17</sup> Nebraska Regional Haze SIP, submitted July 13, 2011, at pages 45 and 48.

<sup>18</sup> The Regional Haze Rule at 40 CFR 51.308(e)(1)(ii)(B) states that the “determination of BART for fossil-fuel fired power plants having a total generating capacity greater than 750 megawatts must be made pursuant to the guidelines in Appendix Y of this part (Guidelines for BART Determinations Under the Regional Haze Rule).”

BART Guidelines, the State is not required to go further in performing a full-five factor analysis for PM to determine BART. While the State is free to make additional findings related to existing controls at GGS and NCS, EPA is not required to act upon them as those findings go beyond what is required by the rule and EPA has determined the State met the minimum requirements for BART analysis for direct PM.

*H. Comments Regarding BART for NO<sub>x</sub> at Gerald Gentleman Station*

**Comment 24:** Many comments were received regarding the cost estimations for SCR at GGS. The commenters asserted the cost estimations provided by Nebraska<sup>19</sup> were not supported by adequate information, such as specific vendor quotes. The commenters argued that Nebraska inappropriately included several costs such as escalation, inflation, allowance for funds used during construction (AFUDC), and an unjustified expense for taking a unit offline to install an SCR (rather than installing it during a routine outage). They also contended that site-specific factors such as real interest rates (5.25 percent rather than 7 percent) and a 30-year expected lifetime (rather than 20 years) should be used. The commenters asserted that these overestimations

---

<sup>19</sup> The commenters refer to these cost estimations as NPPD's. NDEQ accepted NPPD's estimations and submitted them to EPA, so for consistency, we are referring to these estimations as "Nebraska's."

significantly inflate the cost of controls, totaling \$377/kW, higher than known costs associated with any SCR installation. The commenters contend that no information was presented in the Nebraska BART analysis showing space constraints or particular complexity of retrofit which would justify such high cost estimations.

Several commenters stated their belief that at Nebraska's calculated cost of \$2,297/ton, LNB/OFA plus SCR is cost effective for NO<sub>x</sub> control at GGS. The commenters assert that this cost is well within the range of cost effectiveness values required by EPA and other states, and in fact, below the values Nebraska found cost effective for SO<sub>2</sub> controls at GGS. The commenters assert that if the costs of controls were adjusted to correct for inconsistencies with the Cost Control Manual methodology, the controls would be even more cost effective.

One commenter presented a NO<sub>x</sub> BART cost estimation for SCR at GGS using EPA's Cost Control Manual and Integrated Planning Model (IPM) for each of the two Units individually. The commenter concluded that LNB/OFA plus SCR for Units 1 and 2 at a limit of 0.05 lbs/MMBtu would remove almost 20,000 tons of NO<sub>x</sub> per year and cost approximately \$1,900 per ton. They argue that with this

more reasonable cost estimate, the costs of control are below Nebraska's stated threshold of \$40 million/dv, at \$12-19 million/cumulative dv.

**Response 24:** As described below and in Appendix D, E, and F, we agree with the commenters that Nebraska's SCR costs were overestimated by including expenses inconsistent with EPA's Cost Control Manual. In response to these comments, we conducted an evaluation of the cost of SCR, using the information provided by Nebraska and adjusting it in accordance with the Cost Control Manual. We made a number of adjustments to Nebraska's SCR cost estimation, including:

- Adjustments to the engineering, planning, and construction (EPC) cost
- Adjustments to the contingencies
- Deletion of escalation and allowance for funds used during construction (AFUDC)
- Inclusion of a NO<sub>x</sub> control rate cost scenario of 0.05 lbs/MMBtu
- Increasing the SCR operational life from 20 to 30 years
- Adjusting the capital recovery factor (CRF).

We did not exclude the cost of taking a unit offline to install an SCR (rather than installing it during a routine outage), as we do not have any information to show that this is an unreasonable assumption. However, we did reduce this annualized charge from \$1,021,000 to \$833,683, by recalculating it based on our CRF. If the cost was eliminated entirely, it would only change the cost effectiveness \$/ton figures by approximately 2 percent. Therefore, even if the commenter is correct that this charge is unwarranted, it would not have likely impacted Nebraska's decision to eliminate SCR as BART.

Table 2 summarizes EPA's adjustments to Nebraska's cost estimates for SCR control. Nebraska conducted the BART evaluation for the two units at GGS together, so the results presented in Table 2 are combined for the two units.



<b>Table 2: Revised NO<sub>x</sub> cost calculations (SCR), Gerald Gentleman Station, Units 1 &amp; 2</b>				
	<b>Original analysis (NDEQ)</b>		<b>Revised analysis (EPA)</b>	
	<b>LNB/OFA</b>	<b>LNB/OFA + SCR</b>	<b>LNB/OFA + SCR</b>	
<b>Baseline (before control)</b>	30,243	30,243	30,243	30,243
<b>Emission rate (lbs/MMBtu)</b>	0.23	0.08	0.08	0.05
<b>Control efficiency</b>	49%	82%	82%	89%
<b>Controlled emissions (tpy)</b>	15,287	5,317	5,317	3,323
<b>Tons NO<sub>x</sub> removed (total)</b>	14,956	24,926	24,926	26,920
<b>Total Annualized Cost</b>	\$2,960,000	\$57,251,000	\$39,467,000	\$41,760,000
<b>Total cost per ton</b>	\$198	\$2,297	\$1,583	\$1,551
<b>Tons NO<sub>x</sub> removed (incremental over LNB/OFA)</b>	N/A	9,970	9,970	11,964
<b>Incremental cost per ton</b>	N/A	\$5,445	\$3,662	\$3,243
<b>Incremental visibility improvement (delta dv)</b>	N/A	0.49	0.49 <sup>a</sup>	unknown <sup>b</sup>
<b>Total visibility improvement, Badlands</b>	0.66	1.15	1.15 <sup>c</sup>	unknown
<b>Total visibility improvement, Cumulative<sup>d</sup></b>	1.94	3.21	3.21	unknown
<b>Total \$/dv, Badlands</b>	\$4,484,848	\$49,783,478	\$34,319,130	unknown
<b>Total \$/dv, Cumulative</b>	\$1,525,773	\$17,835,202	\$12,295,016	unknown

<sup>a</sup> Note that Nebraska modeled the two units at GGS together. The incremental improvement of 0.49 dv is the average improvement over the three baseline years. If this analysis was separated by unit, the per-unit incremental improvement would be approximately 0.24 dv on average. If the maximum incremental improvement were considered, it would be 0.54 dv for the two units combined, or approximately 0.27 dv for each unit.

<sup>b</sup> Nebraska only conducted CALPUFF modeling at the control rate of 0.08 lbs/MMBtu. We have not determined the predicted visibility improvement resulting from consideration of a lower rate, such as 0.05 lbs/MMBtu.

<sup>c</sup> Total average improvement for the baseline period for the two units combined is 1.15 dv. Average improvement for each unit would be approximately 0.575 dv. Total maximum improvement for the two units would be 1.24 dv, or approximately 0.62 dv each.

<sup>d</sup> GGS impacts 6 Class I areas more than 0.5 dv. Improvements from these 6 areas are included in this calculation.

EPA's reevaluation of Nebraska's SCR cost estimate resulted in lowering the total capital cost from \$478,151,000 to \$320,209,000 for the 0.08 lbs/MMBtu emission rate, a reduction of approximately 33 percent.

This results in an incremental cost effectiveness change from Nebraska's estimate of \$5,445/ton to \$3,662/ton, or \$3,243 per ton if the 0.05 lbs/MMBtu rate is considered.

When the costs are recalculated, it appears that the costs are within a range that many states and EPA have found to be reasonable for NO<sub>x</sub> BART controls. EPA also acknowledges that the recalculated costs are below Nebraska's own thresholds for incremental cost effectiveness (\$5,000 per ton) and cost effectiveness per deciview (\$40 million per deciview), although EPA notes that Nebraska did not provide justification or support in the record for their selected cost effectiveness thresholds.

Therefore, as described here and in section II of this notice, it appears that Nebraska's NO<sub>x</sub> BART determination of LNB and OFA at a rate of 0.23 lbs/MMBtu for GGS Units 1 and 2, by itself, is not supported by the record. However, as described in section II of this notice, Nebraska is subject to the Transport Rule and FIP for NO<sub>x</sub> at 40 CFR 52.1428. EPA has found that the trading programs in the Transport Rule achieve greater reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas than source-specific BART in

those states covered by the Transport Rule.<sup>20</sup>

Given the emission reductions provided by the NO<sub>x</sub> emission limits associated with Nebraska's NO<sub>x</sub> BART determination of LNB and OFA for GGS Units 1 and 2, which strengthen the Nebraska SIP, in conjunction with the existing Transport Rule FIP which already applies to Nebraska and has been determined to provide greater reasonable progress than BART, in today's action, EPA is finalizing its proposed approval of Nebraska's SIP as satisfying the requirements of the Regional Haze Rule with respect to BART for NO<sub>x</sub>, and therefore do not inquire further here as to whether the cost effectiveness of SCR is low enough and the associated deciview improvement significant enough to reasonably determine that SCR is BART for GGS Units 1 and 2.

**Comment 25:** One commenter notes that Nebraska rejected SCR on the basis that it was not cost effective on an incremental basis, a metric which the commenter believes was given undue weight. The commenter contends that if the overestimated costs were corrected even slightly, the incremental cost per ton would be under Nebraska's "arbitrary" threshold for incremental cost effectiveness of

---

<sup>20</sup> See Regional Haze: Revisions to Provisions Governing Alternatives to Source-Specific BART Determinations, Limited SIP Disapprovals, and Federal Implementation Plans, 77 FR 33642 (June 7, 2012)

\$5,000 per ton.

The commenter asserts that the incremental visibility benefits of SCR at GGS are significant. The commenter notes that the control efficiency of SCR used in the State's analysis is less than what the technology is capable of achieving, and if modeling was conducted at a more stringent rate, visibility benefits would be even greater.

The commenter highlights an EPA Region 8 BART decision for North Dakota, requiring SNCR and LNB/separated OFA at an incremental cost of \$5,441 per ton at a facility where the incremental visibility benefit was only 0.105 dv.<sup>21</sup>

**Response 25:** As stated in response 24, we did adjust Nebraska's cost estimations, and found that the incremental cost for SCR at GGS was likely closer to \$3,662 per ton, rather than the State's estimate of \$5,445 per ton. The commenter correctly suggests that this adjusted cost is less than Nebraska's stated cost effectiveness threshold of \$5,000 incremental cost per ton. We agree with the commenter that the State did not support its chosen thresholds in the record.

We agree with the commenter's suggestion that if the

---

<sup>21</sup> 77 FR 20894 (April 6, 2012); proposed at 76 FR 58570 (Sept. 21, 2011).

visibility modeling had been conducted at a more stringent control rate of 0.05 lbs/MMBtu, which an SCR is capable of achieving, the visibility improvements would likely be greater than what is stated in Nebraska's SIP submission, and within a range many states and EPA have found to be significant for control.

Because of some of the deficiencies highlighted by the commenters, we are not able to conclude that the State's NO<sub>x</sub> BART determination was supported by the record.

We respond to comments about the control efficiency of SCR in response 27.

In today's action, EPA determined that Nebraska's NO<sub>x</sub> BART determination for GGS is not supported by the record, therefore, the commenter's suggestion that EPA's approval of Nebraska's NO<sub>x</sub> BART determination for GGS is inconsistent with EPA's action on North Dakota's regional haze SIP is no longer applicable. In today's action, given the emission reductions provided by the NO<sub>x</sub> limits associated with Nebraska's NO<sub>x</sub> BART determination of LNB and OFA for GGS Units 1 and 2, which strengthen the Nebraska SIP, in conjunction with the existing Transport Rule FIP which already applies to Nebraska and has been determined to provide greater reasonable progress than

BART, EPA is finalizing its proposed approval of Nebraska's SIP as satisfying the requirements of the Regional Haze Rule with respect to BART for NO<sub>x</sub>. This action is not inconsistent with EPA's action on North Dakota's regional haze SIP. In that action, EPA disapproved North Dakota's NO<sub>x</sub> BART determination for these Units because the State "relied on cost estimates that greatly overestimated the costs of controls"<sup>22</sup> and "the faults in the cost estimates were significant enough that they resulted in BART determinations for NO<sub>x</sub> for CCS 1 and 2 that were both unreasoned and unjustified." 77 FR 20900. We note that in the North Dakota case, the State estimated the costs for SNCR at \$8,551, and EPA's revised cost estimate was \$2,500, a reduction in costs of 71 percent. This overestimation is much greater than the GGS case, when our analysis only reduced the cost 33 percent. Furthermore, we note that the visibility impacts of these two sources are different, making different conclusions about BART plausible.<sup>23</sup>

Once EPA Region 8 disapproved the Great River Energy Coal Creek Station Units 1 and 2 NO<sub>x</sub> BART determinations in North Dakota's SIP, a FIP was required, and EPA conducted

---

<sup>22</sup> The state estimated costs for SNCR at \$8,551, and EPA's revised cost estimate was \$2,500, a reduction in costs of 71 percent

<sup>23</sup> CCS Units 1 and 2 impact the nearest class I area 4.04-4.48 dv, as opposed to the 2.828-3.121 dv impact due to GGS Units 1 and 2 on the nearest Class I area.

its own source-specific consideration of cost, visibility improvement, and the other regulatory factors to determine what was appropriate as BART.

**Comment 26:** We received comments noting that the two Units at GGS were evaluated in combination. The commenters believe that because the Units are different sizes and have different existing controls installed, a separate analysis for the two Units would be more appropriate. Also, the proposed BART limit was combined across the two Units, and the commenter asserts that Unit-specific limits are required.

**Response 26:** We acknowledge that the pre-control NO<sub>x</sub> emissions profiles for Units 1 and 2 at GGS are different. However, when the commenter conducted a cost analysis for adding SCR for each Unit individually and adjusting the baseline and control efficiency as they saw appropriate, their cost conclusions were similar to EPA's. The commenters calculated the incremental cost to add SCR at a limit of 0.05 lbs/MMBtu to be \$3,481 per ton for the two Units,<sup>24</sup> while EPA's calculations showed an incremental cost of \$3,243 at this limit.

---

<sup>24</sup> As calculated by the commenters, GGS Unit 1's incremental cost for SCR was \$3,399 and Unit 2's incremental was \$3,567, for a two unit average of \$3,481.

In terms of visibility analysis, we believe it was reasonable for the State to combine the two co-located units for purposes of modeling. Again, we note that when the commenter adjusted the baseline individually for the two units as they saw fit, the result was nearly identical to the State's visibility conclusions. The commenters calculated a visibility improvement of 0.24 dv at Unit 1 and 0.23 dv at Unit 2, for a two-unit total of 0.46 dv<sup>25</sup> incremental improvement from SCR at Badlands and 1.29 dv cumulatively. The State's two-unit incremental improvement was 0.49 dv at Badlands and 1.27 dv cumulatively. Therefore, we disagree that an analysis for each unit was necessary, as it does not appear that it would have yielded a different BART determination result.

We disagree with the commenter that unit-specific limits are required. The BART Guidelines, section V state: "You should consider allowing sources to 'average' emissions across any set of BART-eligible emission units within a fence line, so long as the emission reductions from each pollutant being controlled for BART would be equal to those reductions that would be obtained by simply

---

<sup>25</sup> These figures are rounded to two decimal places. Unit 1's improvement is estimated at 0.238 dv, Unit 2 is 0.225 dv, for a two unit total of 0.463 dv.



controlling each of the BART-eligible units that constitute BART-eligible source."

Therefore, it was acceptable for the State to average the BART limits over the two units.

**Comment 27:** Several commenters stated that Nebraska underestimated the ability of modern SCR systems to control NO<sub>x</sub>. Nebraska's SCR evaluation was conducted at a limit of 0.08 lbs/MMBtu, which amounts to approximately an 82 percent control efficiency. However, the commenters present information showing that SCR is capable of achieving at least a 90 percent control efficiency, and note that the BART Guidelines require that the most stringent level of control be evaluated as one of the BART options. The commenters pointed out several recent Best Available Control Technology (BACT) determinations and regional haze FIPs which required limits of 0.05 lbs/MMBtu or lower on a thirty-day rolling average. They state that no information was presented in the State's NO<sub>x</sub> BART evaluation indicating that special circumstances existed which would make the most stringent level of control unachievable.

**Response 27:** The commenter presented evidence that a limit of 0.05 lbs/MMBtu for SCR likely should have been analyzed

in the State's BART determination. We acknowledge that other SCR retrofits have resulted in NO<sub>x</sub> emission levels lower than 0.08 lbs/MMBtu, and at a control efficiency greater than 82 percent, the deciview improvement will likely increase and be in a range that many states and EPA have found to be reasonable for NO<sub>x</sub> BART controls.

As discussed previously, we have determined that the State's NO<sub>x</sub> BART determination was not supported by the record. However, in today's action, we are concluding that the combination of the LNB/OFA controls proposed by the State in combination with the existing Transport Rule FIP, which already applies to Nebraska, satisfies the requirements for NO<sub>x</sub> BART at GGS.

**Comment 28:** Several commenters also stated that the most stringent level of control achievable from the use of combustion controls on GGS Unit 2 needs to be evaluated. They state that Unit 2's existing NO<sub>x</sub> emissions (typically between 0.30 - 0.35 lbs/MMBtu) could likely be controlled well below the proposed joint limit of 0.23 lbs/MMBtu with combustion controls.

**Response 28:** The current annual rate at GGS Unit 2 has varied between 0.305 and 0.348 from the period 2000-2011. The current rate at Unit 2 already reflects an older

vintage of LNB control. Although it is possible that a lower rate could be achieved with new combustion controls, it is unclear what this rate might be and the commenter has not offered documentation as to why a lower rate could be achieved by LNB/OFA on this unit. BART analyses by states and EPA have typically assumed combustion controls to meet a rate of 0.23 lbs/MMBtu for purposes of evaluation of cost and visibility benefit, therefore, EPA sees no reason to conclude that the State's analysis of combustion controls at 0.23 lbs/MMBtu was not reasonable.

**Comment 29:** We received several comments indicating that SNCR was prematurely eliminated as an option for NO<sub>x</sub> BART at GGS. Nebraska eliminated SNCR from consideration as BART on the basis that it is not technically feasible because of high exit temperatures. The commenter cited a similar unit (Boardman power plant operated by Portland General Electric), in which a contractor found an appropriate injection location which would make a 25 percent NO<sub>x</sub> reduction feasible, at an approximate cost of \$14/kW. The commenter also believes that the two units at GGS are different enough that SNCR should be evaluated for each unit individually, rather than in combination.

**Response 29:** The BART Guidelines state, "You should document a demonstration of technical infeasibility and should explain, based on physical, chemical, or engineering principles, why technical difficulties would preclude the successful use of the control option on the emissions unit under review." Nebraska's BART analysis presented a demonstration of why SNCR is technically infeasible for control at GGS Units 1 and 2. However, as described previously, we are not able to determine that the State's NO<sub>x</sub> BART determination was supported by the record, and thus, EPA is not making a determination on the feasibility of SNCR as BART at GGS. EPA notes that evaluation of SNCR cost and control efficiency is unit-specific, so comments indicating that SNCR was feasible and cost effective at another facility do not necessarily support a determination that SNCR is feasible at GGS.

**Comment 30:** One commenter stated that the costs for SCR installation were "under documented". The commenter suggested that the cost estimates were missing significant information, such as vendor quotes, and contended that EPA's proposed approval without this information was "arbitrary". The commenter states that if EPA relied on this information in decision making, but failed to include

it in the docket, the public's notice and comment rights were violated.

**Response 30:** EPA did not rely on information that was not in the docket for this rule. We acknowledge that the vendor quotes provided in the docket (appendix 10.6 of the SIP) are redacted copies, omitting the name of the vendor and certain design parameters. However, we believe that adequate information was presented in order for EPA and the public to review the BART cost estimations.

*I. Comments regarding SO<sub>2</sub> BART at Gerald Gentleman Station*

**Comment 31:** One commenter stated that it agreed with EPA's proposed disapproval of the BART determination for SO<sub>2</sub> controls for GGS. The commenter stated that EPA appropriately determined that dry FGD would result in significant visibility improvement at Badlands. The commenter also stated that it agrees with EPA's proposed disapproval of Nebraska's long-term strategy. The commenter noted that presumptive BART SO<sub>2</sub> controls at GGS were included in the regional modeling that supports the reasonable progress goals for Class I areas in South Dakota, Colorado, Oklahoma, and Missouri that are impacted by GGS. The commenter stated that without SO<sub>2</sub> controls at

GGs, these Class I areas are likely not to meet EPA and the States' reasonable progress goals.

**Response 31:** EPA appreciates the comments in support of today's action. Comments regarding impact on other states RPGs are addressed in section III E of this notice.

**Comment 32:** Several commenters stated that it is within Nebraska's purview to assign the weight and significance for, and to balance each of the BART statutory factors. One commenter states that the plain language of the CAA provides Nebraska with great discretion to balance the five statutory factors. See 42 USC 7491(g)(2) and 77 FR 12770 - 12774 (citing 40 CFR 51.308(e)(1)(ii)). The commenter states that in making its BART determination for GGS, Nebraska followed the BART Guidelines in evaluating the costs of compliance and non-air quality environmental impacts, including consideration of the extent to which short-term environmental gains were being achieved at the expense of long-term environmental losses and the extent to which there may be an irreversible or irretrievable commitment of resources. Another commenter states that through the BART five-factor analysis, Nebraska eliminated wet and dry FGD as control options for GGS using step 4 (costs of compliance) and, more importantly, the

significant non-air quality environmental impacts, including the unique water resource restrictions that exist in Nebraska, the costs of obtaining the water, and the resultant strain on Nebraska's agricultural sector should water reallocations be required. The commenter asserts that EPA bases its proposed disapproval on disagreement over the cost of water without referencing the State's non-air quality determination, the RHR delegates the determination of the non-air quality environmental impacts factor to the State, and the commenter referred EPA to its statements regarding whether the State reasonably considered the relevant factors in its final rule for South Dakota (77 FR 24845, 24853 (April 26, 2012)).

**Response 32:** EPA incorporates by reference its response to comments 6 and 9. EPA agrees that states are assigned statutory and regulatory authority to determine BART and that many past EPA statements, including those the commenter cited in EPA's approval of South Dakota's regional haze SIP, have confirmed state authority in this regard. However, although the states have the freedom to determine the weight and significance of the statutory factors, they have an overriding obligation to come to a reasoned determination. While states have authority to

exercise different choices in determining BART, the determinations must be reasonably supported.

EPA based its decision to disapprove Nebraska's SO<sub>2</sub> BART determination for GGS on a number of issues, including errors in Nebraska's cost analysis for FGD controls, the reasonableness of the costs of controls, the potential for significant visibility improvement as a result of installing FGD or DSI, and improper rejection of DSI. The availability and cost of obtaining water was factored into the cost of controls and the costs were still found to be reasonable, particularly given the significant visibility benefits as a result of controls. Furthermore, as EPA stated in its proposal, DSI does not consume as much water as FGD, and is a viable option for control of SO<sub>2</sub>. For those reasons, we found that Nebraska's blanket dismissal of any SO<sub>2</sub> control under the "non-air quality environmental impact" factor was unreasoned.

**Comment 33:** One commenter questioned EPA's justification for disagreeing with Nebraska's determination that DSI was not reasonable for BART control. The commenter said that Nebraska's reasons for eliminating DSI as BART control were that the technology was relatively new for units the size of GGS Units 1 and 2, and the cost would exceed Nebraska's



dollars per deciview threshold (Nebraska estimated \$95,189,314/dv/year for DSI, exceeding its threshold of \$40 million per deciview per year).

**Response 33:** At \$2,058 per ton, and a visibility improvement of 0.86 dv at the closest Class I area, EPA considers DSI to be cost effective, and the visibility improvements to be significant at the closest Class I area.

Visibility improvement for DSI was only evaluated at Badlands, so we are unable to fully analyze Nebraska's use of the dollars per deciview threshold in this case, as cumulative benefits were not modeled. However, because of the proximity and similarity of impacts between Badlands and Wind Cave, we believe it is reasonable to assume similar visibility improvement would be seen at Wind Cave from the installation of DSI. The annualized cost of DSI at the two units is \$81,958,000, and if similar visibility improvements were seen at Wind Cave (0.86), the cost per deciview would be \$47,650,000<sup>26</sup>. This approaches Nebraska's threshold for reasonableness on a dollars per deciview basis.<sup>27</sup> If the benefit on the other Class I areas GGS impairs was added in to this calculation, the cost per deciview would likely be at or under Nebraska's threshold.

---

<sup>26</sup>  $\$81,958,000 / (0.86 \times 2) = \$47,650,000$

<sup>27</sup> Although EPA notes that Nebraska did not provide justification or basis for its thresholds in the record.

Nebraska did not present information in its SIP submission showing that DSI is technically infeasible at units the size of GGS as a basis to eliminate it from the consideration for BART, and in fact evaluated DSI as a feasible control.

**Comment 34:** One commenter stated that our proposed revisions to FGD cost estimates are not correct. In the TSD for our proposed action, we did a detailed evaluation of the cost estimates provided by Nebraska, and noted where we believed costs to be overestimated or inappropriately included. The commenter incorporated by reference two contractors' assessments of our evaluation.

**Response 34:** The contractors' comments and our responses are described in detail in Appendix G, "Responses to comments and revisions to EPA's evaluation of cost of FGD controls at NPPD GGS Units 1 and 2." Overall, after making adjustments to our cost estimates based on these comments, the cost of controls emerge as even more cost effective than our original estimate, as previously shown in Table 1. These revisions do not change our conclusions that Nebraska overestimated the costs of FGD controls. Our revised analysis reduces the estimated cost of controls from

\$108,535,690 (annualized) to between \$66,530,865 and \$69,519,846 - a 36 to 39 percent reduction in cost.

*J. Comments Regarding Water Availability to Operate FGD*

**Comment 35:** Many commenters reiterated statements in the SIP regarding water availability and concerns about the use of water resources to operate air pollution controls. In order to obtain the water necessary to operate FGD, NPPD would need to obtain the rights to groundwater resources in the over-appropriated Twin Platte Basin. In its SIP, under the "non-air environmental impact" factor of the BART analysis for SO<sub>2</sub> control at GGS, Nebraska determined that this consumptive water use rendered the control unreasonable.

**Response 35:** First, we note that today's action does not require installation of FGD; instead, it relies on the trading program of the Transport Rule, which does not dictate specific controls for specific units, to achieve visibility protection.

EPA acknowledges the concerns about water availability, and recognizes the great care that the State takes to manage limited water resources. We also acknowledge the goals of the Integrated Management Plans (IMP) and obligations of the Platte River Recovery Plan.

However, as we said in our proposal, we do not believe that the water is unattainable, but that it can be obtained at a cost. See response to comment 36 about how these costs were taken into account in estimating the overall cost of controls.

We also note that there are BART control options which do not require nearly the amount of consumptive use of water, such as DSI, which is cost effective and achieves significant visibility improvement. FGD was not the only control option for SO<sub>2</sub> at GGS, so it is not acceptable to use concerns about water availability to rule out all SO<sub>2</sub> controls for BART.

**Comment 36:** Two commenters state that the cost of acquiring water and land has increased since the time the SIP was submitted. The Nebraska Association of Resources Districts states that land costs in the basin have exceeded \$10,000/acre and water rights have been valued up to \$5,000 per acre-foot. NDEQ states that since the SIP was submitted in July 2011, land values have increased in the area, such that in March 2012, a farm with 330 acres of irrigated land sold for \$4,303 per acre. They estimate that this is a 7.5 percent increase in land value from the cost estimates utilized in the SIP.

**Response 36:** We recalculated the costs of obtaining water to operate wet and dry FGD based on these comments.

As seen in Table 3, when these higher land costs are considered, it raises the cost effectiveness of wet FGD from \$2,932 per ton to \$3,245 per ton, an increase of \$313 per ton. These figures should be considered to be conservative for several reasons. First, NPPD's estimates of water use to operate wet FGD were 31 percent higher than the average of other facilities that NDEQ provided in its SIP. Second, we did not include any rental income from the property, value due to production of dry land crops, or the future value of the land in 20 years in calculating these costs. Third, as noted in the proposal, although we did not review the BART cost analysis for wet FGD, many of the same cost overestimations are likely present.

For dry FGD, using our adjusted costs and adding in the higher costs of land and water, the costs are still reasonable, ranging from \$1,897 - \$2,107 per ton.

<b>Table 3: Cost of obtaining water rights to operate FGD at GGS</b>					
	<b>Wet FGD</b>		<b>Dry FGD</b>		
	<b>Estimation in SIP</b>	<b>Estimation revised from comments</b>	<b>EPA's estimates, plus water</b>		
Acre-feet per year required	3,877	3,877	3,238	3,238	3,238
Acres of land required	22,000	22,000	18,374 <sup>a</sup>	18,374	18,374
Cost of land per acre	\$4,000	\$10,000	\$10,000	\$10,000	\$10,000
Total cost to obtain water offsets	\$88,000,000	\$220,000,000	\$183,740,005	\$183,740,005	\$183,740,005
Annualized costs of obtaining water offsets (7% over 20 years)	\$8,306,590	\$20,766,444	\$17,343,757	\$17,343,757	\$17,343,757
Annualized cost of FGD	\$108,450,000	\$108,450,000	\$66,530,865	\$67,871,854	\$69,519,846
Total annualized cost, FGD + water offsets	\$116,756,590	\$129,216,444	\$83,874,622	\$85,215,611	\$86,863,603
Emission Rate (lbs/MMBtu)	0.15	0.15	0.15	0.11	0.06
Tons SO <sub>2</sub> reduced	39,815	39,815	39,815	42,473	45,797
Cost effectiveness (\$/ton)	\$2,932	\$3,245	\$2,107	\$2,006	\$1,897
Average visibility improvement (Badlands)	0.78	0.78	0.78	unknown	unknown
Average visibility improvement (Cumulative)	3.17	3.17	3.17		
\$/dv (Badlands)	\$149,687,936	\$165,662,108	\$107,531,566		
\$/dv (Cumulative)	\$36,831,732	\$40,762,285	\$26,458,871		

<sup>a</sup> Assumes 0.176227 acre feet of water available per acre of land.

**Comment 37:** One commenter pointed out that our analysis of costs to operate FGD did not include loss of agricultural revenue. The State raised concerns in its SIP about the impact to the Nebraska economy if irrigated cropland were to be changed to less-valuable dry land farming.

**Response 37:** While we acknowledge that there may be impacts to the economy that go beyond what was included in the BART analysis, we believe that it would be inconsistent to include the regional loss of agricultural revenue in a BART analysis. BART analyses should be done using EPA's Cost Control Manual, or a similar method for standardizing how costs are taken into account. These types of regional economic influences, both positive and negative, are not included in BART analyses as direct costs of installing and operating emission controls. If such impacts were to be considered, different methodologies and different notions of cost effectiveness would have to be developed. While we are sensitive to broader economic impacts, they are not part of our focused analysis of the BART factors in making a BART determination.

**Comment 38:** We received comments noting that the water requirements of FGD are typically a very small percentage of the water use requirements for a plant overall, which

are largely for cooling, and it is not reasonable to contend that this *de minimis* increase in water use is prohibitive. The commenter also pointed out that GGS uses a "once-through" system, which wastes significant amounts of water. The commenter notes that water saving options that have been employed in other water restricted locations could be employed at GGS to lessen the strain on water resources.

**Response 38:** In general, we agree with the commenter that there are likely efficiency measures which could be undertaken to reduce water use if FGD were installed.

**Comment 39:** One commenter states that any EPA-imposed regulation at GGS that would cause a new consumptive use of water in the over-appropriated Platte River Basin would also increase the competition for water to meet the needs of federally listed threatened and endangered species. To that end, the commenter encouraged EPA to re-initiate consultation with the U.S. Fish and Wildlife Service on the water impacts to the listed species as well as the air impacts.

**Response 39:** The FIP imposed by EPA as a result of today's action does not, in and of itself, cause a new consumptive use of water in the Platte River Basin, therefore, the



commenter's initial premise is not correct. Furthermore, the Department of Interior has had input into this BART determination and rulemaking process. The U. S. Fish and Wildlife Service is part of the U.S. Department of Interior, which is a FLM for Class I areas under the RHR. As such, the RHR requires the State to provide the FLM with an opportunity for consultation at least 60 days prior to any public hearing, including an opportunity for the FLM to discuss their assessment of visibility impairment in any Class I area and to make recommendations on the development of the RPG and implementation of strategies to address visibility impairment. 40 CFR 51.308(i). In its regional haze SIP, Nebraska stated it provided the FLMS a 60-day review period of the draft BART permits and related materials for GGS and NCS beginning July 1, 2008, as well as a 60-day review period for the draft regional haze SIP beginning November 18, 2010. In addition, the FLMS had opportunities to provide comments during Nebraska's public comment period for its regional haze SIP submission, as well as during the public comment period for today's action. During these public comment periods, the Department of Interior, in its comments, did not, to EPA's knowledge, raise concerns about any impacts to endangered

species if controls were required at GGS, and in fact, encouraged EPA to promulgate a source-specific BART FIP requiring SO<sub>2</sub> controls for GGS Units 1 and 2 at 0.06 lb/mmBtu on a 30-day rolling average, which would likely correspond to FGD controls requiring water. EPA also notes that DOI provided input on the national Transport Rule "Better than BART" rulemaking.<sup>28</sup>

*K. Comments Regarding the Transport Rule FIP*

**Comment 40:** One commenter made a factual error in their comment letter, stating that, "EPA simultaneously proposed a federal implementation plan ('FIP') requiring installation of flue gas desulfurization ('FGD') technology at GGS to correct what it perceives to be deficiencies in Nebraska's BART determination."

**Response 40:** The FIP portion of this action does not in fact require FGD controls, but rather relies on the Transport Rule as an alternative for source-specific BART.

**Comment 41:** One commenter referenced and incorporated its February 28, 2012, comments on EPA's proposal that the Transport Rule is "Better than BART" (Docket ID No. EPA HQ-OAR-2011-0729) and its March 22, 2012 comments on EPA's Direct Final Rule related to state emissions budgets under

---

<sup>28</sup> 77 FR 33642 (June 7, 2012).

the CSAPR (Docket ID No. EPA-HQ-2009-0941). This commenter also incorporated by reference the February 28, 2012, comments made by Earthjustice on EPA's proposal that the CSAPR is "Better than BART" (Docket ID No. EPA HQ-OAR-2011-0729). The commenter stated that it is incorporating these comments by reference because these actions are "inherently related" to this action.

**Response 41:** In today's rule, EPA is taking final action on the partial approval and partial disapproval of Nebraska's regional haze SIP. EPA is also taking final action on a FIP relying on the Transport Rule to satisfy BART for SO<sub>2</sub> at one source to address deficiencies in the State's plan. EPA made the proposed findings referenced by the commenter in separate actions and the commenter is merely reiterating and incorporating by reference its comments on those separate actions. These comments are therefore beyond the scope of this rulemaking and are or will be addressed in those separate actions.

**Comment 42:** Two commenters point out that EPA cannot rely on the Transport Rule "Better than BART" finding to meet its BART FIP obligation for GGS because the Transport Rule is not currently in effect and its fate is uncertain. 77 FR 33642 (June 7, 2012). The D.C. Circuit stayed the

Transport Rule on December 30, 2011, pending review on the merits of several consolidated petitions for review of the rule. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. Dec. 30, 2011). As a result of the stay, the Transport Rule currently has no legal effect and is not a binding legal requirement on states and covered sources. EPA cannot rely on its Transport Rule to meet BART or any other requirement until the stay is lifted. Furthermore, a commenter points out that the Court is reviewing several petitions from states and the industry, and the outcome of the Court's review is uncertain.

**Response 42:** EPA disagrees that we cannot rely on the Transport Rule because of the stay imposed by the D.C. Circuit. EPA bases this conclusion on the long-term focus of our analysis underlying today's action.

While the Transport Rule is not currently enforceable, the air quality modeling analysis underlying EPA's determination that the Transport Rule will provide for greater reasonable progress than BART is based on a forward-looking projection of emissions in 2014. However, any year up until 2018 (the end of the first regional haze planning period) would have been an acceptable basis for comparing the two programs under the Regional Haze Rule.

See 40 CFR 51.308(e)(2)(iii). We anticipate the requirements addressing all significant contribution and interference with maintenance identified in the Transport Rule will be implemented prior to 2018.

We do not agree with the comment that because the Transport Rule is subject to review by the D.C. Circuit, EPA cannot move forward with reliance on EPA's determination that it provides for greater reasonable progress than BART. EPA does not view the stay imposed by the D.C. Circuit pending review of the underlying rule as undermining EPA's conclusion that the Transport Rule will have a greater overall positive impact on visibility than BART both during the period of the first long-term strategy for regional haze and going forward into the future. EPA recognizes, as the commenter suggests, that EPA may be obliged to revisit the Nebraska regional haze SIP and FIP if the rule is not upheld, or if it is remanded and subsequently revised. However, EPA does not consider it appropriate to await the outcome of the D.C. Circuit's decision on the Transport Rule before moving forward with the regional haze program as EPA believes the Transport Rule has a strong legal basis, and a judicial decree requires the EPA to meet its statutory obligations to have

a FIP or an approved SIP meeting the Regional Haze Rule requirements in place by June 15, 2012.<sup>29</sup>

**Comment 43:** Two commenters state that given EPA's disapproval of Nebraska's SO<sub>2</sub> BART determination for GGS, EPA must promulgate a source-specific BART FIP with SO<sub>2</sub> limits reflective of the addition of FGD controls at GGS. One commenter contends that due to the issuance of a finding that Nebraska failed to submit its regional haze SIP in a timely manner, EPA is obligated to either promulgate full approval of Nebraska's regional haze SIP or promulgate a FIP. The commenters state that EPA cannot propose to disapprove Nebraska's SO<sub>2</sub> BART determination for GGS without concurrently proposing a FIP. One commenter stated that the GGS Units could meet much lower SO<sub>2</sub> emission rates than 0.10 lbs/MMBtu analyzed by Nebraska with installation of new FGD systems, either wet or dry. They restated our conclusion that FGD at GGS with could achieve 0.06 lb/MMBtu,<sup>30</sup> a 90 percent control efficiency. The commenters point out the significant visibility improvements available from this level of control, greater than the improvement modeled by Nebraska. (Nebraska modeled rates of 0.15 lbs/MMBtu and 0.10 lbs/MMBtu, but no

---

<sup>29</sup> *National Parks Conservation Association, et al. v. Lisa Jackson*, Civil Action No. 1:11-cv-01548 (ABJ) (D.D.C. March 30, 2012).

<sup>30</sup> 42 FR 12780 (March 2, 2012)

more stringent controls). The commenter argues that EPA's proposed FIP relying on the Transport Rule as an alternative to BART is legally and technically unjustified; installation of FGD systems at a rate of 0.06 to 0.15 lbs/MMBtu is cost effective and results in significant visibility improvement; and it is arbitrary, capricious and unreasonable for EPA to require otherwise. In addition, the commenter believes additional controls are routinely being required in the application and implementation of regional haze in other states and for other sources throughout the country.<sup>31</sup> Both commenters contend that EPA should instead promulgate a source-specific BART FIP requiring SO<sub>2</sub> controls for GGS Units 1 and 2 at a limit of 0.06 lbs/MMBtu on a 30-day rolling average.

**Response 43:** EPA agrees with the commenter that in the absence of an approvable BART determination for SO<sub>2</sub> for GGS, EPA is obligated to promulgate a FIP to satisfy the CAA requirements under section 110(c)(1), but EPA disagrees that this necessarily requires a source-specific SO<sub>2</sub> BART FIP for GGS. At the point EPA becomes obligated to promulgate a FIP, EPA steps into the State's shoes, and must meet the same requirements, has flexibility to make

---

<sup>31</sup> The commenter cites as examples, the final FIPs for the San Juan Generating Station in New Mexico (76 FR 52388) and Oklahoma (76 FR 81727) and the proposed FIP for North Dakota (76 FR 58570).

technical judgments within the bounds of the rule, and, as discussed previously in this notice, is not statutorily obligated to impose source-specific controls. The regional haze rule provides certain flexibilities to the state (and to EPA, in the case of a FIP) to determine appropriate BART. Rather than requiring source-specific BART controls, EPA has the flexibility pursuant to 40 CFR 51.308(e)(3) to adopt an emissions trading program or other alternative program as long as the alternative provides greater reasonable progress towards improving visibility than BART. EPA recently finalized its rule determining that the trading programs in the Transport Rule, achieve greater reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas than source-specific BART. 77 FR 33642 (June 7, 2012). While EPA opted to promulgate source-specific SO<sub>2</sub> FIPs in other states, such as in Oklahoma and New Mexico to address deficiencies in BART determinations, in its June 7, 2012 rulemaking, EPA also promulgated FIPs for other states relying on CSAPR to remedy deficiencies in BART determinations. See also EPA's response to comments 3, 6, and 8, which are incorporated by reference.



**Comment 44:** Two commenters urged EPA to require specific SO<sub>2</sub> controls on GGS as a geographic enhancement under EPA's proposed rulemaking revising the RHR to allow the trading programs in the Transport Rule as an alternative program to BART.<sup>32</sup> One commenter suggests that this may be done by proposing a geographic enhancement to the Transport Rule as a FIP as part of the action on the Nebraska regional haze plan, or by proposing a supplement to the Transport Rule to require lower emission limits for Nebraska as a geographic enhancement, or by removing Nebraska from the finding that the Transport Rule is better than BART.

**Response 44:** The primary purpose of EPA's existing regulatory language regarding geographic enhancements, at 40 CFR 51.308(e)(4), is to allow a market-based system to accommodate actions taken under the RAVI provisions. No RAVI finding has been certified that would apply to GGS. A state may always choose to include in their SIPs provisions applicable to a specific source even if RAVI is not triggered. In today's action, EPA is finalizing its partial FIP relying on the Transport Rule as an alternative to SO<sub>2</sub> BART for GGS, and choosing not to pursue any geographic enhancements. This is based on EPA's separate

---

<sup>32</sup> See 76 FR 82224, footnote 13, which describes how states may also include in their SIPs provisions applicable to a specific source even if no FLM agency has made such a reasonable attribution.

rule finding that the trading programs of the Transport Rule meet the Regional Haze Rule's requirement that the average difference in visibility improvement at all Class I areas be greater under the alternative program. Therefore, EPA has met the minimum requirements for SO<sub>2</sub> BART for GGS by relying on the Transport Rule. The commenters' suggestions that EPA should propose a supplement to the Transport Rule to require lower emission limits for Nebraska as a geographic enhancement, or remove Nebraska from the finding that the Transport Rule is better than BART are beyond the scope of today's action.

**Comment 45:** EPA received many comments regarding EPA's rule allowing the trading programs in the Transport Rule as an alternative to BART. Several commenters strongly disagreed that EPA's rulemaking (Docket ID No. EPA-HQ-OAR-2011-0729) revising the Regional Haze Rule to allow the trading programs in the Transport Rule as an alternative program to BART provides greater visibility improvement than source-specific BART at GGS. Commenters pointed out what they contend to be errors in EPA's IPM modeling assumptions for GGS emission rates for the 2014 base case and 2014 CSAPR scenarios; omission of GGS Unit 2 emissions and under predicted impacts at Mingo Wilderness Area from

the IPM modeling; reliance on outdated, lower Transport Rule emission budgets for several states without remodeling to account for the revised, higher emission budgets<sup>33</sup>; and negative effects on the ability of each state's Class I areas to make reasonable progress towards the national visibility goal of achieving natural background conditions by 2064. One commenter provides that the language of the CAA at section 169A(b)(2)(A) and (c) requires source-specific BART emission limits and EPA may only exempt a source from BART based on certain demonstrations that the source does not cause or contribute to significant impairment of visibility, after sufficient notice and comment rulemaking and concurrence by the appropriate FLM. Commenters requested that EPA remove Nebraska from the determination that the BART alternative is better than source-specific BART controls in Nebraska.

**Response 45:** In today's rule, EPA is taking final action on the partial approval and partial disapproval of Nebraska's regional haze SIP and the FIP relying on the Transport Rule to satisfy BART for SO<sub>2</sub> at one source to address the approvability issues. The rule referenced by the commenter is a separate action and these and similar

---

<sup>33</sup> See 77 FR 10324 (Feb. 21, 2012) and 77 FR 10342 (Feb. 21, 2012).

comments were made in the context of that separate action. These comments are therefore beyond the scope of this rulemaking. These comments, and those similar to it, on the Transport Rule "Better than BART" rulemaking have been addressed, as appropriate, by EPA in its final action on the December 30, 2011, proposed rule. 77 FR 33642 (June 7, 2012). See also EPA's response to comment 6, which is incorporated by reference.

**Comment 46:** A commenter noted that the Transport Rule will not require additional SO<sub>2</sub> controls for EGUs in Nebraska, and questioned the validity of an approach that appears to conclude that no SO<sub>2</sub> reductions is better than a BART reduction of over 28,000 tons per year. The commenter contends that by averaging across all Class I areas, EPA is allowing states like Nebraska to benefit from controls in other states and to install less controls under the Transport Rule than would be required by source specific BART.

**Response 46:** EPA disagrees with the commenter's characterization of EPA's conclusions related to the Transport Rule "Better than BART" rulemaking. EPA refers the commenter to EPA's final action on the December 30, 2011, proposed rule, 77 FR 33642 (June 7, 2012), where EPA

demonstrated that, on average, the Transport Rule results in greater average visibility improvement at affected Class I areas compared to application of BART nationwide.

*L. Comments Regarding BART at Nebraska City Station*

**Comment 47:** One commenter stated that they believe that similar issues with regard to estimated cost of controls likely persisted throughout the cost estimations for BART at Nebraska City Station, and encouraged EPA to revisit these analyses.

**Response 47:** The commenter's statements did not contain any detail or evidence to indicate that we must find the State's evaluation flawed and re-open it to conduct our own independent analysis.

Furthermore, our approval of the NO<sub>x</sub> and SO<sub>2</sub> BART determination at Nebraska City Station rests on the State's determination that the minimal visibility improvement available did not warrant the costs of the next level of controls. For NO<sub>x</sub>, Nebraska concluded that based on the high incremental cost of \$8,203<sup>34</sup> per ton for the low incremental visibility improvement of 0.11 dv at Hercules Glades, requiring SCR was not warranted. BART for NO<sub>x</sub> at

---

<sup>34</sup>  $(\$38,210,000 - \$1,690,000) / (14,633 - 10,181) = \$8,203$

OPPD NCS Unit 1 was determined to be the installation of LNB/OFA with an emission limitation of 0.23 lbs/MMBtu.

Similarly, for SO<sub>2</sub>, Nebraska concludes that the cost of installing FGD (\$1,636 per ton)<sup>35</sup> is not warranted considering the amount of visibility improvement (0.44 dv maximum improvement at Hercules Glades), and therefore proposes no SO<sub>2</sub> controls as BART for NCS Unit 1. EPA notes that the closest Class I areas to this Unit are 500 km away or greater.<sup>36</sup> NCS Unit 1's baseline impact is 0.65 dv at Hercules Glades, and 0.46 dv at Wichita Mountains, for a cumulative baseline impact of 1.11 dv.<sup>37</sup> The potential improvement from installing FGD at the presumptive rate of 0.15 lbs/MMBtu is 0.25 dv on average at Hercules Glades, and 0.23 dv on average at Wichita Mountains, for a cumulative improvement of 0.48 dv. With an annualized cost of \$34,720,000, this makes the dollar per deciview for presumptive SO<sub>2</sub> control at NCS \$72,333,333, which is well over the State's threshold of \$40 million/deciview.

---

<sup>35</sup> Cost per ton is \$1,636 at the limit of 0.10 lbs/MMBtu.

<sup>36</sup> Distance from Nebraska City Station to Hercules Glades is 498 km; to Mingo is 630 km; and to Wichita Mountains is 695 km.

<sup>37</sup> As shown in the TSD, these calculations are based on a three year average, 2001-2003. Maximum baseline impact at Hercules Glades was 0.933 dv in 2001, and 0.686 dv at Wichita Mountains in 2003. These are the only two Class I areas which were impacted more than 0.5 dv as shown by the CALPUFF modeling for the baseline period.

*M. Comments Regarding Interstate Transport*

**Comment 48:** One commenter stated that EPA failed to ensure that the Nebraska regional haze SIP will not interfere with interstate transport visibility requirements. The commenter cites to section 110(a)(2)(D)(i) of the CAA which requires states to submit new SIPs that provide for the implementation, maintenance, and enforcement of a new or revised standard within three years after promulgation of such standard, and specifically to section 110(a)(2)(D)(i), which applies to interstate transport of emissions. This "interstate transport" prong requires that SIPs be adopted to prohibit any source from emitting pollution which will "(I) contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such national primary or secondary ambient air quality standard, or (II) interfere with measures required to be included in the applicable implementation plan for any other state under part C of this subchapter to prevent significant deterioration of air quality or to protect visibility." The commenter points out that EPA issued a finding that Nebraska failed to submit an interstate transport SIP to address the 1997 ozone and particulate matter NAAQS, after which Nebraska submitted an interstate

transport SIP submittal, and EPA approved it, stating, "At this time, it is not possible for NDEQ to accurately determine whether there is interference with measures in another state's SIP designed to protect visibility, which is the fourth element that was addressed. Technical projects relating to visibility degradation are under development. Nebraska will be in a more advantageous position to address the visibility projection requirements once the initial regional haze SIP has been developed." 72 FR 71246 (Dec. 17, 2007). The commenter states that in its approval of the transport visibility prong, EPA's reliance on the regional haze SIP and caveat that in a vacuum the interstate transport requirements may be insufficient to ensure adequate visibility protection, necessitates analysis of the regional haze plan in conjunction with interstate transport requirements.

**Response 48:** As the commenter notes, on April 25, 2005, EPA published a "Finding of Failure to Submit SIPs for Interstate Transport for the National Ambient Air Quality Standards for 8-hour Ozone and PM<sub>2.5</sub>." 70 FR 21147. This included a finding that Nebraska and other states had failed to submit SIPs to address interstate transport of emissions affecting visibility and started a 2-year clock



for the promulgation of FIPs by EPA, unless the states made submissions to meet the requirements of section 110(a)(2)(D)(i) and EPA approved such submissions. *Id.*

On August 15, 2006, EPA issued guidance on this topic entitled "Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards" (2006 Guidance). We developed the 2006 Guidance to make recommendations to states for making submissions to meet the requirements of section 110(a)(2)(D)(i) for the 1997 8-hour ozone standards and the 1997 PM<sub>2.5</sub> standards.

As identified in the 2006 Guidance, the "good neighbor" provisions in section 110(a)(2)(D)(i) of the CAA require each state to have a SIP that prohibits emissions that adversely affect other states in ways contemplated in the statute. Section 110(a)(2)(D)(i) contains four distinct requirements related to the impacts of interstate transport. The SIP must prevent sources in the state from emitting pollutants in amounts which will: (1) contribute significantly to nonattainment of the NAAQS in other states; (2) interfere with maintenance of the NAAQS in other states; (3) interfere with provisions to prevent

significant deterioration of air quality in other states; or (4) interfere with efforts to protect visibility in other states. With respect to establishing that emissions from sources in the State would not interfere with measures in other states to protect visibility - which is the subject of this particular comment - the 2006 Guidance recommended that states make a submission indicating that it was premature, at that time, to determine whether there would be any interference with measures in the applicable SIP for another state designed to "protect visibility" until the submission and approval of regional haze SIPs.

On December 17, 2007, EPA approved Nebraska's SIP revisions for addressing the "good neighbor" provisions of the CAA in a direct final rulemaking. 72 FR 71245. EPA did not receive any comments on the 2007 SIP action. In today's action, EPA is not re-opening the 2007 approval of Nebraska's SIP as it relates to the CAA section 110(a)(2)(D)(i). Today's action also does not serve as an approval or disapproval of any of Nebraska's section 110(a) infrastructure SIP submittals as they pertain to any NAAQS; those actions are not relevant to today's action and will be addressed in separate rulemakings as appropriate.

Even if the visibility prong of section 110(a)(2)(D)(i), as it relates to the 1997 NAAQS and EPA's 2007 approval action, were relevant to this rulemaking, the requirements of the Act and the regional haze rule are satisfied by an approved SIP, a promulgated FIP, or a combination of a SIP and FIP. The control measures approved and promulgated for Nebraska in today's action will serve to prevent sources in Nebraska from emitting pollutants in amounts that will interfere with efforts to protect visibility in other states and thus satisfy the "interference with visibility protection" sub-element of CAA section 110(a)(2)(D)(i)(II).<sup>38</sup>

*N. Technical Corrections*

**Comment 49:** OPPD pointed out an error in the Nebraska City Unit 1 PM potential to emit in Table 1 of our proposal, "Facilities with BART-Eligible Units in Nebraska." OPPD stated that the listed potential to emit for PM (43,792 tons per year) is too high, and estimated it to be 3,415 tons per year.

---

<sup>38</sup> Although the SIP is deficient as described elsewhere in today's action, the partial FIP addresses those deficiencies, and no further action is needed to address the visibility requirements. However, Nebraska may revise its SIP and submit the revision to us, to address the requirements covered by the FIP. Should such a revision meet CAA requirements, we would replace our FIP with Nebraska's SIP revision. We encourage the State to revise its SIP to address these requirements.

**Response 49:** Table 1 is a listing of the units in Nebraska which are BART-eligible based on source category, date, and emissions. The 43,792 figure came from Appendix 10.1 of the SIP. In response to this comment, we checked with the State, who confirmed that the figure was too high, and estimated the potential to emit to be 2,968 tons per year.<sup>39</sup> Changing this figure does not change the determination that Unit 1 at Nebraska City Station is BART-subject.

**Comment 50:** NPS commented that Table 5 of the Technical Support Document, "BART subject facilities in Nebraska," contained a numerical error. Impacts should read less than 0.5 dv rather than less than 0.05 dv.

**Response 50:** The table is corrected to read as follows:

---

<sup>39</sup> Email from Shelley Schneider, NDEQ to Chrissy Wolfersberger, EPA, dated May 17, 2012.

<b>Table 5: BART-subject facilities in Nebraska</b>					
<b>Facility</b>	<b>Units</b>	<b>Class I area</b>	<b>CALPUFF modeled impacts &gt; 0.5 dv</b>		
			<b>2001</b>	<b>2002</b>	<b>2003</b>
OPPD Nebraska City Station	1	Hercules Glades	0.933	0.556	< 0.5
		Wichita Mountains	< 0.5	< 0.5	0.686
NPPD Gerald Gentleman Station	1 & 2	Badlands	2.845	2.828	3.121
		Wind Cave	2.452	2.591	2.127
		Wichita Mountains	1.032	1.206	1.392
		Rocky Mountain	1.136	1.246	1.053
		Hercules Glades	0.826	0.616	0.594

#### **IV. Regulatory Text**

EPA proposed a FIP relying on the Transport Rule as an alternative to BART for SO<sub>2</sub> emissions from GGS. Accordingly, EPA proposed to revise 40 CFR Part 52, Subpart CC to reflect EPA's proposed determination that the requirements of 40 CFR 51.308(e) with respect to emissions of SO<sub>2</sub> from NPPD, GGS Units 1 and 2 will be met by 40 CFR 52.1429, the Transport Rule FIP requirements for SO<sub>2</sub> emissions in Nebraska. In today's action, EPA made minor clarifying changes to the FIP language in 40 CFR 52.1435 to better set forth the scope and applicability of EPA's disapproval and FIP.

## **V. Statutory and Executive Order Requirements**

### **A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review**

This action will apply to one facility and is therefore not a rule of general applicability. In addition, this rule does not impose new mandates, because EGUs in Nebraska are subject to the requirements of the Transport Rule independently of this action. Therefore, this action is not a "significant regulatory action." This type of action is exempt from review under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011).

### **B. Paperwork Reduction Act**

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act ([44 U.S.C. 3501](#) et seq.).

### **C. Regulatory Flexibility Act**

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.

Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) a small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this final action on small entities, I certify that this final action will not have a significant economic impact on a substantial number of small entities. The FIP for the NPPD Units being finalized today does not impose any new requirements on small entities. The partial approval of the SIP merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. See *Mid-Tex Electric Cooperative, Inc. v. FERC*, 773 F.2d 327 (D.C. Cir. 1985). Moreover, due to the nature of the Federal-State relationship under the CAA, preparation of flexibility analysis would constitute Federal inquiry into the economic

reasonableness of state action. The CAA forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. U.S. EPA*, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

#### **D. Unfunded Mandates Reform Act**

This rule does not contain a Federal mandate that may result in expenditures of \$100 million or more, adjusted for inflation, for state, local, and tribal governments, in the aggregate, or the private sector in any one year. EPA has determined that the approval action proposed does not include a Federal mandate that may result in estimated costs of \$100 million or more to either state, local, or tribal governments in the aggregate, or to the private sector. Thus, this rule is not subject to the requirements of sections 202 or 205 of the UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. This rule contains regulatory requirements that apply to two units at one coal-fired power plant in Nebraska.

#### **E. Executive Order 13132: Federalism**

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the



various levels of government, as specified in Executive Order 13132, because it merely addresses the state not fully meeting its obligation to adopt a SIP that meets the regional haze requirements under the CAA. Thus, Executive Order 13132 does not apply to this action. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and state and local governments, EPA specifically solicited comments on the proposed rule from state and local officials.

**F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments**

This rule does not have tribal implications, as specified in Executive Order 13175, because the action EPA is taking neither imposes substantial direct compliance costs on tribal governments, nor preempts tribal law. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this rule.

**G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks**

Executive Order 13045 (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be economically significant as defined under Executive Order 12866; and (2) concerns an environmental health or safety risk that we have

reason to believe may have a disproportionate effect on children. EPA interprets EO 13045 as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the EO has the potential to influence the regulation. This action is not subject to EO 13045 because it implements specific standards established by Congress in statutes.

**H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use**

This action is not subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

**I. National Technology Transfer and Advancement Act**

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use "voluntary consensus standards" (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical. The EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS. This action does not

involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

**J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations**

Executive Order 12898 (59 FR 7629, February 16, 1994), establishes federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

We have determined that this rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. This rule does not impose any new mandates, because EGUs in Nebraska are subject to the requirements of the Transport Rule

independently of this action. See 77 FR 33642, for an analysis of the implications of Executive Order 12898 in relation to EPA's final rule, "Regional Haze: Revisions to Provisions Governing Alternatives to Source-Specific Best Available Retrofit Technology (BART) Determinations, Limited SIP Disapprovals, and Federal Implementation Plans" (June 7, 2012). The partial approval of the SIP merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law.

#### **K. Congressional Review Act**

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 804 exempts from section 801 the following types of rules (1) rules of particular applicability; (2) rules relating to agency management or personnel; and (3) rules of agency organization, procedure, or practice that do not substantially affect the rights or obligations of non-agency parties. 5 U.S.C. 804(3). EPA is not required to submit a rule report regarding today's

action under section 801 because this is a rule of particular applicability.

#### **L. Judicial Review**

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [insert 60 days from publication in Federal Register.] Pursuant to CAA section 307(d)(1)(B), this action is subject to the requirements of CAA section 307(d) as it promulgates a FIP under CAA section 110(c). Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. See CAA section 307(b)(2).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control,  
Incorporation by reference, Intergovernmental relations,  
Nitrogen oxides, Particulate matter, Reporting and recordkeeping  
requirements, Sulfur dioxide, Volatile organic compounds.

Dated: \_June 15, 2012

---

Lisa P. Jackson,  
Administrator.

Title 40, chapter I, of the Code of Federal Regulations is amended as follows:

**PART 52 - [AMENDED]**

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

2. § 52.1420 is amended by:

a. Revising the heading for paragraph (d) and the heading for the table in paragraph (d);

b. In paragraph (d), adding entries (3) and (4) to the table in numerical order; and

c. In paragraph (e), adding entry (25) to the table in numerical order to read as follows:

§ 52.1420 Identification of plan.

\* \* \* \* \*

(d) EPA-approved state source-specific requirements.

**EPA-Approved Nebraska Source-Specific Requirements**

Name of source	Permit No.	State effective date	EPA approval date	Explanation
*****				
(3) Nebraska Public Power District, Gerald Gentleman Station	CP07-0050	5/11/10	[Insert date of publication in the <u>Federal Register</u> ], [Insert <u>Federal Register</u>	EPA has only approved the elements of the permit pertaining to NO <sub>x</sub> requirements.

			citation]	
(4) Omaha Public Power District, Nebraska City Station	CP07-0049	2/26/09	[Insert date of publication in the <b><u>Federal Register</u></b> ], [Insert <b><u>Federal Register</u></b> citation]	

(e) \*\*\*

#### EPA-Approved Nebraska Nonregulatory Provisions

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date	EPA approval date	Explanation
*****				
(25) Regional haze plan for the first implementation period	Statewide	6/30/11	[Insert date of publication in the <b><u>Federal Register</u></b> ], [Insert <b><u>Federal Register</u></b> citation]	The plan was approved except for that portion pertaining to SO <sub>2</sub> BART for Nebraska Public Power District, Gerald Gentleman Units 1 and 2, and the portion of the long-term strategy addressing the SO <sub>2</sub> BART measures for these Units.



3. Section 52.1437 is added to read as follows:

§ 52.1437 Visibility protection.

(a) *Regional Haze*. The requirements of section 169A of the Clean Air Act are not met because the regional haze plan submitted by Nebraska on July 13, 2011, does not include approvable measures for meeting the requirements of 40 CFR 51.308(d)(3) and 51.308(e) with respect to emissions of SO<sub>2</sub> from Nebraska Public Power District, Gerald Gentleman Station, Units 1 and 2. EPA has disapproved the provisions of the July 13, 2011 SIP pertaining to the SO<sub>2</sub> BART determination for this facility, including those provisions of the long-term strategy addressing the SO<sub>2</sub> BART measures for these units.

(b) *Measures Addressing Partial Disapproval Associated with SO<sub>2</sub>*. The deficiencies associated with the SO<sub>2</sub> BART determination for Nebraska Public Power District, Gerald Gentleman Station, Units 1 and 2 identified in EPA's partial disapproval of the regional haze plan submitted by Nebraska on July 13, 2011, are satisfied by §52.1429.

[FR Doc. 2012-15192 Filed 07/05/2012 at 8:45 am; Publication  
Date: 07/06/2012]